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BOARD OF MANAGEMENT.

THE usual monthly meeting of the Board of Management of the Jamaica Agricultural Society was held at the office of the Society, No. 11 North Parade, on Thursday, 17th June, 1909, at 11.40 a.m. Present : Hon. P. C. Cork, C.M.G., Acting Governor, presiding, the Hons. L. J. Bertram, C.M.G., Dr. Pringle, C.M.G., R. P. Simmonds, Messrs. R. Craig, C. A. T. Fursdon, William Harris, Acting Director of Agriculture, A. C. L. Martin, E. W. Muirhead, Conrad Watson, and the Secretary, Jno. Barclay.

Apologies for absence were read from His Grace the Archbishop, Hon. Geo. McGrath, J. Shore and D. Campbell.

The Secretary said his Grace had asked him to say that there was another important meeting fixed for the first Thursday after the second Sunday, which fell very often on the day of the Board meeting on the third Thursday of the month, and so he would not be able to attend often. He left matters in the hands of the Board whether he should resign. If the Board thought he could be useful as a member with so few attendances but working on the Committees, he would be glad to be of use.

It was resolved to ask each member of the Board if the third Thursday of the month was still the day that suited the majority best.

Minutes. The minutes of the previous meeting having been printed and circulated were taken as read.

Mr. Craig took exception to the accuracy of the paragraph referring to tbe appointment of an Instructor for South Manchester and Southern St. Elizabeth. He contended that the proposal was not to appoint an "Assistant Instructor," but simply an "Instructor" for that district.

Dr. Pringle and other members held that the minutes were correct, and on a vote the minutes were allowed to stand as they were. The minutes were then confirmed.

Arrangements for Instructors. The Secretary submitted the following letters from the C. S. O. *re*:—

(a) Grant for South Manchester, No. 5671/6870, 3/6/09.

I am directed by the Governor to acquaint you for the information of the Board of Management of the Jamaica Agricultural Society, that

the Legislative Council has voted the sum of £250 for the assistance of agriculture in the Southern Districts of Manchester and the South-eastern Districts of St. Elizabeth.

This provision has been made in order to carry out the recommendations contained in part 10 section (e) agricultural teaching of the report of the Commission appointed to enquire into the economic conditions of South Manchester and South-eastern St. Elizabeth, a copy of which is enclosed for your information, and the Governor desires that it should be administered by the Board of Management.

His Excellency will be glad if you will be so good as to submit to him as soon as possible the Board's proposals in detail for carrying out these recommendations of the Commission.—(Sgd.) ROBERT JOHNSTONE, Assistant Colonial Secretary.

(b) Experiment Station, No. 5739/9601, 7/6/09.

I was directed by the Governor to transmit herewith for the information and consideration of the Board of Management of the Jamaica Agricultural Society, an extract from a letter from the Resident Magistrate of Manchester and St. Elizabeth, and with regard to paragraph 3 thereof, to say that His Excellency would be glad to be favoured with the opinion of the Board on the suggestion that there should be an Experimental Station at the Wigton Court Station.—(Sgd.) ROBERT JOHNSTONE, Acting Colonial Secretary.

The following is the extract referred to :—

Sir,—I have the honour to report that the lands attached to the Wigton Court Station in Manchester were not rented during the past year and that I have not been able to secure a tenant for this year owing to my refusal to allow the use of fire, as I am informed.

2. I do not believe anyone wanted the use of the lands in question, but I declined to permit the use of fire in consequence of the close proximity of these lands to the court buildings.

3. I respectfully suggest that these lands be placed at the disposal of the Agricultural Instructor for the Wigton district as an experimental station. A great band of idlers assembles at the Wigton Court, and the object lesson to be afforded to such a station would, in my opinion, be beneficial.—(Signed) I. RICHARD REECE, Resident Magistrate, Manchester and St. Elizabeth.

(c) Scarcity of water in Manchester, No. 5823/6289, 7/6/09.

I was directed by the Governor to transmit, for the information of the Jamaica Agricultural Society, the accompanying copy of a report by the Superintendent of Parochial Roads and Works for Manchester, relating to the scarcity of water in the districts of Southern Manchester.—(Sgd.) G. M. WORTLEY, Actg. Asst. Colonial Secretary.

Mandeville, May 6th, 1909.

To the Chairman and Members of the Parochial Board of Manchester.

Gentlemen,—By resolution of your Board passed at the meeting hel[d] on the 1st April, I was instructed to expend the sum of £10 from th[e] Local Road Reserve Fund for the purpose of constructing or renderin[g] passable a road leading from Victoria Town through "Mumby," Robert Run, etc., to the spring at the head of the Alligator Hole River on Mil[k] Pen, for the purpose of affording the people of Victoria Town and t[he] neighbouring settlements, access to those springs, and thus to relieve t[he] condition of water famine which, it was alleged in the petition to H[is] Excellency the Governor, had arisen in this district or was imminent.

Accompanied by Mr. J. S. Nicolson, one of the members for t[he] Southern District, I visited the locality on Tuesday, 13th April, and h[ad] an opportunity of meeting several persons interested in the question ... of South-east Manchester.

was generally accepted that the centre of the district which was suffering from scarcity of water, was about the point where the parochial road No. 84, joins with the main road at Victoria Town (see plan herewith). From this point following the main road to Spring Plain and on the Scott's Fording at the Rest, where water is available, is a distance of about 4¾ miles. Following the track from the same starting point to the springs at Milk Pen, would be about the same distance. It was evident therefore, that the suggestion of giving a public right of way to the springs at Milk Pen, would confer no advantage on the settlers which they did not now possess. Indeed, the advantage would be on the other side, owing to the rough country to be traversed to the Milk Pen Springs. The construction of a road to the springs was furthermore unnecessary as a well-defined path, certainly rough in some parts, but quite walkable with loads, exists from Victoria Town to the spring, and its use is apparently unchallenged by proprietors along its course. We met about six persons coming from the spring and about eight or nine washing clothes there.

The expenditure of £10 on the track would make no noticeable impression on its present state or grades, as portions of it pass over very hard limestone, while the opening up of a better road to the springs would be a very costly undertaking and one which would afford to the great bulk of the people, little improvement in the present conditions. The money has therefore, not been spent.

In passing through the village of "Mumby," we noticed several signs of that neglect which is responsible for deficiency of water in many parts of the parish, and especially in those districts which from de-forestation are now so susceptible to droughts. Several of the holdings seem at some time or the other to have been provided with "kick-and-buck" tanks, but most of these had been abandoned by the present owners. On enquiring the cause, I was informed by Mr. Gregory, one of the oldest inhabitants (if not the oldest) of the district, that indifference on the part of the present owners accounted for this condition of things. When I saw him he was busy locking the enclosure around his tank, and thus protecting the remnant of his water supply from the encroachments and importunity of neighbours.

The necessity for an improved water supply for this and other districts of Southern Manchester is self-evident, but the remedy must greatly depend upon the people themselves, the soil being extremely well adapted to the construction of "kick-and-buck" cisterns, which may be considered in this country as the poor man's tank. On my visit to Victoria Town, I was informed by intelligent and respectable residents, that proposals to form a sort of mutual association for the building of tanks, was being discussed in the district. Such associations would no doubt, prove helpful and valuable in connection with any scheme of bonuses which the Parochial Board might adopt even as an experiment for a while.

The outpost of public tanks in this direction of the parish, is one recently built at Pratville, a distance of about 5¼ miles to 5½ miles from the parish line at the Spring Plain.

A sketch plan from the cadastral map is attached, showing the places referred to above.—(Sgd.) ALFRED G. NASH.

True copy.—(Sgd.) G. A. BONITTO, Clerk Parochial Board.

(d) Distress in South Manchester and South-east St. Elizabeth, No. 5987/6790, 10/6/09.

I am directed by the Governor to state, for the information of the Board of Management of the Jamaica Agricultural Society, that the Chairman of the Parochial Board of St. Elizabeth, has suggested that help be afforded to the sufferers from the drought in that parish to recultivate their lands and to purchase stock to replace those that have died, such

does not advocate that money be given to the people except in extreme cases.

His Excellency desired that the Society would be so good as to obtain a report on this suggestion from their local Instructor.—(Sgd.) ROBT. JOHNSTONE, Acting Colonial Secretary.

All these matters, the Secretary reported, had been referred to the Instructors' Committee and he submitted their report :—

A meeting of the Instructors' Committee was held at the office of the Society on Wednesnay afternoon at 3.30, to consider the matter of the re-arrangement of districts, and to appoint three new Instructors as referred by the Board of Management. Present: Mr. Wm. Harris, acting Director of Agriculture, in the chair; the Hons. L. J. Bertram, and R. P. Simmonds, Messrs. D. Campbell, R. Craig, and the Secretary. Mr. Cradwick was also present at the meeting at the request of the Committee. They beg to report that :

1. They had before them (a) papers on the subject already circulated among the members of the Committee.

(b) Letters from C. S. O., having reference to the districts of South Manchester and South-eastern St. Elizabeth.

(c) Twenty applications for the position of Instructors in response to the Secretary's advertisement inserted twice each in three daily and one weekly newspapers.

2. They recommend :—(a) The division of the instructural district of Manchester and St. Elizabeth into a northern and southern district, the latter to cover the drought districts, the boundaries of which may be more exactly defined later by the Secretary in conjunction with the Instructors concerned.

(b) The appointment of Mr. E. J. Smith, teacher at Top Hill, St. Elizabeth, for the southern district, from the ten applicants, as Instructor for that district; as he has proved himself qualified by actual practice and experience as a cultivator in that district; and as he is commended equally by the South Manchester Branch, and the residents in the district to be covered, and by the Instructors Messrs. Palache and Cradwick, remuneration to be at the rate of £12 10s. a month to include travelling expenses, for five days a week actual work, three mouths' notice on either side.

This remuneration will be paid from the special vote of the £250 made by the Legislative Council, for South Manchester. From the balance will be paid the expenses on three Central Experiment Plots, as recommended by the Commission, for which £20 each might be allocated, leaving the balance to assist the districts with seeds and plants, etc.

The Secretary might be instructed to communicate with the Chairman of the Parochial Board of St. Elizabeth, as regards the relief of the people, so that he and the Instructor might act in conjunction with any relief given by the Parochial Board.

(c) Mr. Palache to take the northern district of Manchester and St. Elizabeth.

They recommend (a) a north-western district of the parishes of Trelawny and St. James, relieving Mr. Mennell of the latter parish and Mr. Arnett of Trelawny, so that the latter may be better available for the special work the Board calls upon him to do, such as the judging of the Prize Holdings Competition.

The appointment of Mr. H. Q. Levy. of Brown's Town, as Instructor for the proposed districts of Trelawny and St. James, to be remunerated at the rate of £20 6s. 8d. per month to include travelling expenses, five days a week actual travelling work, three months' notice on either side.

They recommend (a) the formation of an eastern district, to comprise St. Thomas-in-the-East from Johnson River as a northern boundary, (Mr. Briscoe taking west of that division), round to Port Antonio, to cover the Branch Societies at Bath, Hector's River, Priestman's River, and Moore

Town, the Instructor for which will supervise also the proposed cocoa nursery at Bath, with an experienced labourer to work the nursery and distribute plants.

(b) The appointment of Mr. L. A. Wates, of Elmwood, Priestman's River, Portland, who is highly recommended to take his position as assistant Instructor to Mr. Cradwick, who will supervise his work, to give nine days actual travelling work, to be remunerated at the rate of £12 10s. a month. three months' notice on either side.

They recommend that Mr. Hirst, Instructor for Clarendon and St. Catherine, be asked to give 15 days a month instead of 11, for an addition at the rate of £50 per annum to his present remuneration of £200. The Committee regrets that the available funds will not allow of the Board taking his whole time.

They recommend that Mr. Cradwick's district include St. Mary and Portland west of Port Antonio, (except that small part of St. Mary worked by Mr. Briscoe from Castleton) together with the supervision of the work of his assistant, Mr. Wates, in the eastern district; that Mr. Cradwick be allowed to live where he pleases, so long as the place is convenient for his work as Instructor.

All these recommendations to take effect on 1st July, for the remainder of the financial year—nine months.

They recommend that it be arranged at once for Mr. Arnett to be the judge in the Prize Holdings Competition as last year, in order that early arrangements can be made for this work, and that £50 be allocated to Mr. Arnett for this purpose to cover all costs of the judging.

These allocations of funds amount to £387 10s. out of £400 available, leaving a balance in reserve of £12 10s.—(Sgd.) WILLIAM HARRIS, Acting Chairman.

Mr. Craig moved the adoption of the report, Mr. Simmonds seconded.

The Chairman moved as an amendment, that the Instructor for the southern district be "Assistant Instructor" to Mr. Palache, and should work in concert with him, and that the necessary alterations be made in paragraph 2b. Dr. Pringle seconded, and on a vote being taken, four voted in favour of the amendment, Hons. L. J. Bertram, and Dr. Pringle, Mr. Martin and the Chairman, and six voted in favour of the report as it stood: Mr. Craig, Mr. Fursdon, Mr. Simmonds, Mr. Watson, Mr. Muirhead and Mr. Harris.

The report was therefore adopted as it stood.

Mr. Muirhead asked if there was to be any reduction of pay of Instructors when districts were reduced, and whether any check was kept of their work.

The Secretary said the complaint had been that the districts were too large, and that there was always some special work occurring, when the Board took some of the Instructors from their ordinary duties. The Instructors whose districts were now reduced would be able to give that closer attention to their reduced districts, which was desirable, and their full time was engaged all the same.

Itineraries of work proposed to be done and detailed reports of how that work had been carried out, were submitted each month and circulated round the Instructors' Committee.

With reference to the proposal to make one of the experimental stations at Wigton Court House, it was decided to abide by the re-

commendations of the Manchester Commission in that respect, because of the supervision and protection that would be afforded.

As regards distress in St. Elizabeth, the Secretary was directed to follow the recommendations of the Committee, that the sum of £77 10s. held in reserve might be used for judicious relief of cultivators in co-operation with the Parochial Board and the Instructor.

C. S. O. Letter. The following letter from the C. S. O. was submitted *re* adulteration of rum, No. 5327/S.S.133/09, 25/5/09 :

I am directed by the Governor to transmit herewith, for the information of the Board of Management of the Jamaica Agricultural Society, a copy of a despatch from the Secretary of State for the Colonies, on the subject of the adulteration of rum.—(Sgd.) ROBERT JOHNSTONE, Asst. Col. Secretary.

Jamaica, No. 133. Downing Street, 28th April, 1909.

I have the honour to transmit to you the accompanying copy of a letter from the West India Committee on the subject of the adulteration of rum, and to inform you that copies of this letter and the correspondence enclosed in it, have been sent to the Governors of Malta and the West African colonies, and the High Commissioner for Cyprus, for their information.—(Sgd.) CREWE.
Governor Sir Sydney Olivier, K.C.M.G., etc.

Enclosure to despatch No. 133, of 28th April, 1909.

The West India Committee,
15 Seething Lane, London, E.C., 7th April, 1909.

My Lord,—I have the honour to transmit herewith a copy of correspondence which has passed between my Committee and the Board of Customs, on the subject of the adulteration of Jamaica rum, and I am to express the hope that your Lordship will be pleased to bring it before the notice of the Customs Departments of our West African colonies and of Malta and Cyprus, to which places we understand that much of the adulterated rum is at present consigned.—(Sgd.) ALGERNON ASPINALL, Secretary.
The Right Honourable the Earl of Crewe, K.G., Colonial Office.

THE ADULTERATION OF RUM.—The following correspondence has recently passed between the West India Committee and H. M. Board of Customs on the subject of rum adulteration :—

The West India Committee to the Board of Customs :

Sir,—I have the honour, by direction of my Committee, respectfully to call your attention to the injury which is being done to the legitimate rum trade by the practice resorted to in this country, of mixing a small proportion of rum with plain spirits, and shipping the product to the colonies as rum.

2. My Committee are aware that under the existing regulations of H. M. Board of Customs, the casks containing such spirit have to be branded, scribed, or cut with the words "Mixed Rum." It has, however, been represented to them that, except to the initiated, such inscription is illegible and is in any case, very easily removed by an adze or paint, as the case may be, and that consequently this protection proves to be altogether inadequate.

3. I am therefore, respectfully to request that His Majesty's Commissioners of Customs will consider the advisability of giving instructions that the casks may be marked in a more distinct manner, and with an inscription which will more accurately indicate the nature of the contents ; and that they may see their way to take such further steps as may seem

desirable and practicable, to put a stop to a practice which is admittedly injurious to the genuine West Indian rum industry.—(Sgd.) ALGERNON ASPINALL, Secretary, November 4th, 1908.

Board of Customs to the West India Committee:

Sir,—I am in receipt of your letter of the 4th instant asking, on behalf of the West India Committee, that casks containing a mixture of rum and plain spirits for exportation, may be marked (1) in a more distinct manner, and (2) with an *inscription indicating more accurately*, the nature of the contents.

In reply, I beg to inform you that the question as to the best method of marking casks, is at present being considered by this Board, with the view of discovering whether any alteration of the regulations is advisable and would be acceptable to the trade generally.

Your second proposal as to the nature of the inscription, relates to important matters which are at present the subject of enquiry before the Royal Commission on Whisky and other potable spirits, and the Board, while noting the views of your Committee are of opinion that it is desirable to await the report of the Commission before considering the question of making any change in the existing regulations on this point.—(Sgd.) L. N. GUILLEMARD, November 10th, 1908.

Sheep. The following letters on the subject of the importation of woolless sheep were submitted:

I am exceedingly sorry that after making all arrangements to get the woolless sheep to Jamaica, I have received the following from Sir Alfred Jones. Seeing there is no other way to take them, I have to give up the idea.—ISAIAH A. DELL, Calabar, West Africa.

Letter enclosed by Sir Alfred Jones from the Board of Agriculture, as follows:—I am directed by the Board of Agriculture to advert to your letter of the 19th March, as to the transhipment in British ports of sheep from West Africa en route for Jamaica, and I am to express the regret of the Board that in view of the provisions of the Diseases of Animals Acts, 1894 and 1896, such a proceeding cannot be sanctioned.

Resolutions. The following resolutions from Branch Societies were submitted:

(a) Sav-la-Mar *re* disease of coconuts.

Passed at meeting held on the 21st May last: "Whereas the Agricultural Instructor, Mr. H. D. D. Mennell, has brought to the knowledge of the meeting the great extent to which coconut disease has spread in the parish of Westmoreland, and the fact that his unaided efforts have been unavailing to check the ravages of the bud rot in particular, and that he has reported the same to the parent Society, resolved that this Society respectfully ask if it be possible that the parent Society appoint a commission to examine into and report on the cause or causes of this disease, and to suggest remedies for the same."

After discussion, the Secretary was directed to reply that Mr. Cradwick had already been investigating bud rot disease in the west end for some years when stationed there, and was continuing his investigations in the east end now; that the disease was well known in the East and West Indies and wherever coconuts were grown,—that it was thought to be a bacterial disease—that there was no known cure after the trees had given plain indications of the disease, but if tak ed into the l

The Secretary was directed to collect all the references to bud rot disease in the AGRICULTURAL JOURNAL and send them to the Acting Director of Agriculture, who was asked to edit them in a useful pamphlet together with any other matter found in the *Bulletin* on the same subject.

(b) Fair Prospect :

"That the Board of Management of the Jamaica Agricultural Society do consider the advisability of procuring the ways to enable Mr. Cradwick, Travelling Instructor for this parish, to establish a Demonstration Plot, under the auspices of this Branch in this district, for the purpose chiefly of demonstrating to settlers the proper methods of cultivating the crops, notably bananas."

The Secretary was directed to reply that the Society had no fund for this purpose, but that the Instructor just appointed for that district, Mr. L. A. Wates, might be asked if he could carry out demonstrations on his own property, which was in the district.

Cruelty to Animals. The following letter from the Society for the Protection of Animals was submitted :

It has been suggested that this Society might co-operate with the various Branch Agricultural Societies throughout the island, and that pamphlets might be distributed and persons recommended for medals by the members of local Agricultural Societies who might care to join the S. P. A. J.

It was decided that the Secretary should furnish a list of the Branch Societies with their Secretaries, and state that there would be no objection to the Society for the Protection of Animals putting itself in touch with the various Branch Societies.

Grants to Shows. The following applications for grants to shows were made :—(a) Port Royal Mountains, on 5th August ; (b) Santa Cruz Mountains, on 9th November.

Grants were made subject to the usual regulations being observed.

Affiliation. Application for affiliation from the Upper Metcalfe Agricultural Society was submitted. Affiliation was granted subject to the rules covering affiliation of Branches being observed.

Committees. The Secretary gave notice that at the next Board Meeting a re-arrangement of the committees, rendered necessary by alterations among members of the Board, might be discussed, and asking for smaller committees in some cases to facilitate the circulation of papers.

Half-Yearly Meeting. The Half-yearly General Meeting was fixed to be held after the meeting of the Board of Management on 15th July, at 12.45 p.m.

The Instructors' Reports and Itineraries were submitted and directed to be circulated around the members of the Instructors' Committee.

Mr. Simmonds tabled a cutting from a newspaper with reference to cocoa disease in Portland, where it was said that "at a meeting of the St. George's Branch Society, there was a heated discussion over the action of the Government, which was not even willing to spend a couple of pounds to fight the disease in cocoa which threatened the district."

Mr. Simmonds said that the subject had never been brought before the Board, and if it had been brought before the Department of Agriculture or the Goverment, this was a matter that ought to have been brought before them. A good many people reading the paragraph might have the idea that the matter had come before the Agricultural Society and that they had done nothing. As a matter of fact it was stated that "the Government had taken up an attitude of utter indifference to the requests of planters for assistance in putting a stop to the disease."

His Excellency, the Chairman, said he knew something about the matter. Shortly before Sir Sydney Olivier left for England he had received a deputation, who had made representations to him on this subject; that it had been left to him (the Acting Governor) to take up the matter, and he confessed that he had not thought of sending the papers to the Agricultural Society, but would now do so. He would say that when the disease had been observed in Portland, the Director of Agriculture had been advised of it, and had asked that Mr. Cradwick, the Agricultural Instructor, be sent to make investigations. Mr. Cradwick had identified the disease of the pods as "Black Rot," and had applied to the Director of Agriculture for spraying machines and materials for treating the trees. Mr. Cradwick went through the district and attended to several cultivations and in all cases except one, the cultivators paid for the field labour necessary in pruning and spraying the trees. In one case, however, the owner of the property wished the Government to pay the expenses. There was no money voted for such a purpose, and the proprietor was so informed. He wrote to persons who had complained about the disease, informing them that the disease had been identified : and sent them a copy of a pamphlet from the Imperial Department of Agriculture, showing what the disease was and explaining its treatment. He also sent them a leaflet written by Mr. Cradwick on the subject.

Mr. Muirhead said he had brought to the attention of the Board the matter of the almost entire loss of a cargo of oranges shipped by the *Port Kingston* on November 19th last, and pointed out that other shipments at the same time by the same people arrived by the Elders and Fyffes steamer to Manchester in excellent condition, and he wished to know if the Society had done anything in the matter.

The Secretary replied that the matter had been given the consideration of the Board, that at the same meeting there had also been a letter from Sir Alfred Jones submitted stating that it had been found impossible to carry oranges and bananas on the same steamers without loss, also a letter from Mr. Stockley, asking that

some steps should be taken to prevent irresponsible shippers sending off immature fruit. A suggestion had been put forward by the Board that moveable bulkheads might be used between the bananas and oranges, to be shifted according to the quantity of cargo, and this had been forwarded by the agent to Elder, Dempster and Co.'s office, Liverpool, but no reply had yet been received. Mr. Muirhead's letter on the subject had also been submitted to a meeting of the Orange Industry Committee, but they had made no comment on the subject, as their attention had been taken up with the question of inspection of fruit.

Mr. Craig tabled a cutting from the newspapers *re* a report of Porus Branch, stating that a discussion would take place at the next meeting, which he asked, the Secretary be directed to attend and report on. This was agreed to.

The meeting adjourned till 15th July, at 11.40 a.m.

THE PATENT AUTOMATIC WATER FINDER.

This is a simple apparatus by which any unskilled person may readily ascertain whether a subterranean spring of pure water exists under a spot where boring operations are desired.

The instrument indicates the presence of subterranean flowing springs at depths up to 1,000 feet.

The principle on which the instrument works is the measuring of the strength of the electrical currents which are constantly flowing between earth and atmosphere, and which are always strongest in the vicinity of subterranean water courses, the flowing waters of which are charged with electricity to a certain degree. Should a subterranean spring be present under where the instrument has been fixed, the needle commences to move; note being carefully taken of the number of degrees on the scale, and the position of the instrument changed from time to time, the spot where the greatest movement of the needle has been obtained is that where the well boring should be made.

If the needle remains stationary, it may be taken for granted that a subterranean spring does not exist under the spot where the instrument is fixed.

The instrument will appeal to those who are interested in "Water Finding," and who can appreciate the importance of having the knowledge before commencing costly boring operations, whether a good spring of water will be found or not within reasonable limits.

Well boring engineers know how often they have bored upwards of 1,000 feet without finding water. The hundreds of pounds spent on any one of these fruitless borings, would have been saved by consulting the Patent Automatic Water Finder for five minutes.

Observations should always be taken between 8 and 12 in the morning and two and five in the afternoon, these being the hours of

day should be selected, as the instrument does not work so well when earth and atmosphere are saturated with moisture. The instrument does not work under trees or in the immediate vicinity of iron structures.

The instrument indicates watercourses flowing underground in a natural state, and not water pipes or sources that have sprung up to day-light.

The instrument has been thoroughly investigated by leading scientists and engineers, who have given their professional opinions and vouch for the successful application of the invention.

Numerous experiments have recently been made over metalliferous soils with very satisfactory results, the movement of the needle having a distinct peculiarity according to the ground over which it is working. The value of the instrument is thus considerably enhanced.

The instruments are made in two sizes, the £100 one for locating subterranean springs at depths up to 1,000 feet, and the £50 one at depths up to 500 feet. These prices include packing and delivery f.o.b. steamer, London or Liverpool.

HAND-FED CALVES.

Many are now raising calves by hand who have had no experience or training in the art before, and the result is much mortality, and many sickly-looking, pot-bellied calves hardly worth raising.

Here are some hints.—Never feed a calf any milk but fresh new milk from either its mother or a fresh cow until it is not less than ten days old, then mix it with half skim milk and gradually reduce the whole milk until the calf is a month old. Never try to feed a calf cold milk until past two months of age. Always warm the milk to about 100 degrees, and never warm it to the point of scalding it. I know at the present time scientists are advising the warming of milk (sterilizing it) by bringing it up to 168 degrees and holding it there for ten minutes, to kill possible disease germs. All such milk should be doctored by the use of calf meal or linseed oil meal. *Never stir linseed meal, oatmeal, wheat bran or middlings or any other meal into milk.* Always gently pour the meal on top of the milk, and as the calf drinks the milk the meal will settle to the bottom of the pail, and then the calf will lick it and suck it down and no harm will follow. When it is stirred in the milk scouring may result, as the meal will be carried along the digestive tract with the milk further than it should be before the gastric juices will act upon it. Never feed loppered or sour milk to a calf. Sweet butter milk after a calf is two months of age, may be fed as a part mil food; but acid or sour butter-milk never feed to a calf.

In conclusion, I will say study to prevent calf scour. Thi should be the effort of all calf raisers—not seek remedies to cure it Keep all pails used in calf feeding as clean as you do your milk pails

the calves have taken their milk. When calf raisers will learn to observe the simple precautions I have mentioned, scouring calves and weak, emaciated ones will rarely be seen.

It is most important to note that part where it is impressed, that meals (not made into a porridge that can be eaten) must not be stirred into milk that is drunk. If so, the meal goes right through with the liquid into the second stomach or still further without being detained for digestion. All meal and grain foods should first be chewed and go into the first stomach.

There is an exception to this and that is, that a handful of arrowroot, which is the most digestible of all starches, and has no roughage in it like meals, can be added beneficially to the milk fed to calves, and it is a good preventive of ordinary scours caused by too laxative foods. . But of course arrowroot cannot counteract the effects of dirty vessels, cold milk, or irregular feeding in young calves.

OTHER LANDS.

A REPRESENTATIVE of the Department of Agriculture in Canada travelled through Europe, and in making his report gave his impressions of other lands visited. This is a good policy of the Canadian Government to send representatives abroad to pick up all the knowledge they can about agriculture and commerce that can be useful to Canada. Of course the conditions differ very much in Jamaica, but none the less it is interesting to read of the agricultural conditions in other lands.

We can learn many things from practices done elsewhere ; some practices are of course inapplicable, but some can be adapted and applied. The most interesting thing to us in the following quotation is the great use made of legumes (peas and beans) in Italy. These serve the double purposes of keeping up the fertility of the soil and supplying nitrogenous food at the meals of the people. The peasants, or everybody for that part of it, are pretty well fed so far as nourishment goes, where various forms of peas, beans and lentils, and macaroni,—the latter largely consisting of the gluten of wheat are used. Formerly in Jamaica foodstuffs may not have been cheaper, but they were certainly more substantial than what are used at the present day. Too much white flour bread and too much tinned stuff are being now used. People find out by instinct what is a balanced food as it were, and we find it here in the rice-and-peas,—yam and saltfish mixtures. We should try, however, to take a lesson from the Italian practice and grow more legumes—more peas and beans of all kinds and use them. This would be to the benefit of the soil and the physical well-being of the people. A little land well tilled is the motto of the European peasantry in most countries there.

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also to be worked out in practice, for in the past fifty years, while the increase in cereal acreage has been only 25 per cent., the increase of cereals produced has been 70 per cent., showing an increase of one-third in the productions of the soil.

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Italy.—Like the Swiss and the French, the peasant people of Italy, are a frugal, thrifty race, and while the rich eat wheat bread, the workpeople are content with bread made from corn or rye.

Legumes everywhere. In looking about, to find out how the fertility of the soil was maintained in districts where live stock was not common, and hence farm manure was far from plentiful, I noticed that everywhere leguminous crops (or pulse), were the rule. I also discovered that in some form it was eaten every day by rich and poor alike. All the time I was in Italy I never once sat down to a dinner without being served with peas, or beans, or lentils, or some other variety of leguminous annual. I found also that the poorer classes consumed large quantities of pulse, it being used to a large extent as a substitute for meat. Where the Irish peasant finds his balanced ration in potatoes with pork, the Englishman, in bread and cheese, the Scotchman, in oatmeal and milk ; so the Italian rests content with macaroni and pulse, and the land gets the benefit in restored fertility.

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Switzerland.—*Not more land*, but *a little land well tilled.* That seems to be the motto of the Swiss farmer.

Where dairying is practised soiling is generally in vogue. No grain is fed in summer, but after a little dry hay, fed at 5 a.m., the cows are watered, and then fed all the fresh-cut green grass that they will take. The manger is generally filled twice during the forenoon and again about milking time at night. In winter they feed at 6 a.m., and 5 p.m., just after milking.

The cows are generally the Spotted Swiss, or a grade which looks very much like her. Very often they are grey or mouse-coloured, but always large and strong looking. At first glance they appear too beefy looking to give much milk, but on a closer inspection you find a good heart girth, indicating strong constitution, a large barrel, or bread basket, and a heavy bone. It is this last feature, I think, that makes them appear clumsier and more beefy in appearance than they really are.

The Swiss farmer believes in the general purpose type. His best grade cows, such as will produce 7,000 or 8,000lbs. of milk a year, are worth on the market from £28 to £30 apiece, and after they have been milked three or four years, they are speyed and fattened and sold for beef, bringing about £20 to £25 each.

Milk and butter average very little higher in price than ours, but the Swiss farmers are more economical feeders ; their markets [illegible] to the

milk of Switzerland is condensed milk, or is made into cheese, and Swiss cheese is popular all over Europe. It is open, having large air spaces and holes all through it, and is most palatable and digestible. It is invariably pure white, and is served every day to every guest at the leading hotels in Italy, Switzerland and France.

Speaking generally of Swiss farming, I would say that their simple living, intensive methods, and their patient industry, in which every member of the family joins, account for the undoubted prosperity of the farmers of Switzerland.

COCOA.

It is conceded that not even with the exception of bananas and sugar, cocoa can be our most steadily profitable crop in suitable soils and climates here. As with other things, however, it seems that where cocoa grows most readily of itself it has been allowed to do so, and the owners have gone on the principle of taking what they got. There are some highly cultivated and well-regulated cultivations not in the best situations for cocoa growing, where good results are obtained, as well as the splendid results in typical good locations where care and thought and labour are expended on the plantation. Even in these places, however, the owners have many troubles with their trees, so that the same constant care and attention and never-ending watchfulness have to be kept up.

What then must be the result where cocoa trees having grown strong and rampant for many years without any attention, without pruning to let light and air in, without drainage to carry off surplus moisture in wet weather, without the soil ever being broken, without rotten branches and diseased pods ever being cleared out of the way, until the trees themselves are covered with moss and the soil is stiff and sour. There are many places where this applies,—in St. Thomas-in-the-East and Portland, and Upper St. Andrew and St. Mary especially.

Surely it would be a good policy to concentrate attention in getting all cocoa trees healthy and brought into full bearing rather than getting the same owners to plant more cocoa in other parts of the same land. Of course if the owners of trees are hopeless, and do not see what is to their advantage, and there are other men who have not planted cocoa at all yet who wish to do so, and have a suitable location, it is good to encourage them, but with hotbeds of disease close by unattended to, the other plantations despite great care (which they will not always receive), will be attacked by and by when the trees begin to cover the ground, probably just when they are coming into full bearing.

A regular campaign against cocoa and coconut diseases is necessary. Amongst small settlers it is a rare thing to see cocoa trees that are bearing to anything like the full extent they are capable of.

It is even more necessary than manuring, this question of getting the cocoa trees healthy first, but in St. Thomas-in-the-East

A VALUABLE LOTION.

ZINC sulphate is worth about 1/- a pound in Kingston, and lead acetate about the same. Probably 1/6 or so would be charged. One ounce of each in a quart bottle of clean water and a good shake —that's "White Bottle." My ponies' hoofs got so brittle they were being shod every three weeks, and could not "hold" even that long. Four weeks ago I "minded on" "white bottle," and after they were shod, the boy wiped the hoofs and frogs well with the lotion, soaking well into the old nail-holes; and he wiped the hoofs over with it every other day after. To-day the shoeing smith is scratching his head to know what "Dactah been doin' wid dem yah hawse foot, favah like a only las' week dem shoe!"

The use of it for saddle (and harness) chafes and galls, for cuts and bruises, and as an astringent stimulant lotion for old chronic sores, is well known to you.

"Brittle-hoofs" is especially common at this rainy season (in St. Thomas) and after the dry weather returns it is worse yet. The habit all native shoeing smiths have of "raspering" the toes all over and, (what is far worse) cutting a deep groove with the rasp under the clinches, removes the tough outer layer of horn, and the groove cuts thousands of the horn-fibres across. Evaporation takes place from the "raw" horn and the hoof gets brittle in consequence. The alternate wet and dry of the rainy season "rots" the unprotected horn just as it does leather. "White bottle," as it were, "tans" the raw horn and keeps in the natural moisture of the hoof.

You know more than I do about hoof ointments. I have tried several well-known formulae, but they are nasty, messy things at best. Unless there is "thrush" or "grease," this lotion does the needful.—HARRY G. JOHNSTON, M.D.

[We have used this lotion regularly for cuts, chafes and bruises, and for itch in horses' skins, and found it most successful. But we have never used it as a hoof lotion and we are glad to have the idea given us.—ED.]

WHITE ANTS.

WE have received the following from a German firm which may interest some readers who have been complaining about damag done by white ants.

IN figuring with the fact that many argicultural undertaking suffer more or less from termites, so-called "white ants," I tak the liberty of recommending my apparatus and preparation for thei destruction.

Firstly, I have constructed an apparatus, the "termite finder,' which makes it possible to locate the insects' nests. The "termite finder" is a steel pipe, at the top end of which is placed microphone This is further connected with a telephone by a cord. If the pip

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depths. If one wishes to seek termites near trees, all that is necessary is to put the end of the pipe against the tree. If one wants to locate a certain district, the best way is to have two labourers each with a 'termite-finder' at distances of 5-6 metres. In this way, all the nesting places of the ants will be located.

To smoke out the nest, the same must be bored with a simple "earth-borer" (a crow ?), 3½ feet long and 4 inches in diameter. Generally several nests are together and are connected by walks. In the hole bored one places a miniature oven "Pandora-box." The top of this oven must be just visible. Into this, air must be pumped to keep alive the combustion of a specially prepared mass contained therein and which generates smoke. Slowly and carefully a hand pump is to be used so that the oxygen reaches the fire and the poisonous gases from the mass are forced below through the air pressure.

The preparation manufactured by me called "Smoke-snake," generates sulphuric acid. The prepared stuff is about one metre long and as thick as a finger, is rolled up, and fits into the "Pandora-box" after taking off two tops (coils). In this way they are carried easily even by domestic labour.

The same manipulation is necessary for trees which have been attacked by termites and rendered hollow by them.

The insects by breathing the poisonous gases die very soon. The holes naturally, which have been made on the living trees, would have to be stopped up with cement or clay.

It is to be recommended that the above way of exterminating the termite is to be done frequently, regularly and systematically. The cost is not great comparing it with the damage done by the termites.—FRIEDRICH SUCK, Hamburg, 15 (Sachsenhof).

PIGS.

MANY pig breeders in the country do not find they are able to keep the long-bodied bacon breeds of pigs with profit; they require too much feeding and attention.

So many Poland Chinas and Berkshires have been introduced of late years that the old fashioned China breed with the smooth skin, short legs, and close quarters, is almost bred out of existence. Many now wish to get back into this breed, but it has been difficult to get good representatives of the breed, and even what can be got do not breed true.

In 1895 the Agricultural Society imported 12 pure-bred pigs of different breeds into Jamaica, and we find from old records that these consisted of two Poland Chinas, four Berkshires, and six Essex. There have also been private importations—these have all been of the large bodied breeds (with the exception of a pair of Essex pigs imported two years ago by Dr. Todd, of Black River), mostly Poland Chinas, Berkshires, with also some white pigs like Yorkshire and Chester Whites.

Those who would go back to the old easily cared type of China pig cannot do better than get pigs of the Essex type, and we recommend them to turn to the advertisement of Dr. Todd, Black River, who imported a boar and a sow of that breed and has young pigs for sale.

LIVE STOCK PESTS.

KEEP cows carefully clean of ticks. Look up the advertisements in the JOURNAL if you wish any good tick mixture, but if you want to try a home-made mixture, there are plenty of things that can be used with some success. Some of the best are :—Bitter wood, a strong decoction made sticky with sour orange juice or soft soap,—this is economical where bitter wood is plentiful. Where tobacco is grown, take the tobacco stems and boil them up in a strong decoction, and rub into the hair,—this can also be made sticky as before, and is of course very economical. Another cheap mixture is to take the liquor from rotten banana stems (which smells very badly) mix with seville orange juice, and if these oranges are not to be got, lime juice, or soft soap boiled in it ;—and half pint of tar to a kerosine pan full of this mixture, and *stir well before using.* The cows should be washed with this, rubbing against the hair, not with a piece of cloth but with a brush made of trash—a cloth is not much good. These mixtures also kill lice on horses and fleas on dogs. This banana juice mixture is the cheapest considering its effectiveness, we know.

Then there is the preparation now sold by the Island Chemist at 7d. per lb., "Paranaph." The addition of hot water to this paste makes a cattle wash which has been well tested at Hope and has been found most effective. We shall be glad to have experiences of readers in fighting ticks and pests generally, on stock.

VEGETABLES.

Although the island of Jamaica is a land that ought to be flowing with milk and honey, milk is extraordinarily dear and honey is seldom used on tables. It should also be a land where an abundance of fruit and vegetables should be available for every table. Fruit is available but is not so much used as it ought to be. Vegetables, however, all over the country are scarce, and by vegetables we mean succulent vegetables, and fruits used as vegetables like the tomato and the garden egg. Even in Kingston vegetables are not over plentiful, although the cool mountains close at hand are providing more and more. In other parts vegetables are exceedingly scarce and seldom seen. We mean such vegetables as turnips, carrots, beet, lettuce, spinach, cress, cabbage ; the last named is the most frequent, but it is only seen to any extent in the cool months. Tomatoes also are not infrequent, but usually only during the three months between Janua

Green peas of any kind are a rarity. Pumpkin is more common, but it is more of a root food and has not the same beneficial effect as succulent green vegetables and tomatoes. Onions are also rarely in use, and those used are imported.

For the health as well as the gratification of the household, an effort should be made to grow a garden. Owing to the ignorance and carelessness of "boys," it is not an easy matter we know to keep up a regular garden, especially in the summer time. We know a number of people who "used" to possess a vegetable garden, but have given it up, tired of the constant struggle with the "boys" who worked the garden and who possessed the unhappy knack of doing most things wrong. upside down. We can feel for them. All people should give their hearty support to the School Garden idea, as through them we must in a few years, get boys who have had some training in proper gardening. Constant attention is required for a garden, and unless the housewife can give time and trouble, the master has usually other items of work far more engrossing and of more financial importance. In most districts the watering can has to be in constant evidence from January to March inclusive. In the hills such vegetables as we have named can be had all the year round, but in the lowlands, cabbages, turnips, and carrots are very difficult to get in the summer. However, with tomatoes, okras, spinach, as well as green peas and green beans—which can always be raised—a fair variety can be had on the table all through the hot months. We wish to draw the attention of those who like vegetables, to Kohl Rabi. This has a flavour between turnip and cabbage, and is more easily grown than either,—certainly far more easily grown than cabbage. The easiest grown vegetable of all is green peas,—by this we do not mean what are here called "English" green peas, but all our own varieties,—the 'Quick-increase' especially. But even the ordinary field cowpeas make good vegetables when taken at the proper time. When the pods are very yonng they can be used as string beans, and before they are dry they can be used as green peas. The native spinach—kallaloo—is one of the most valuable of all vegetables for the blood, and costs nothing, but how seldom it is used comparatively.

The chocho and ochro seem to be almost the only vegetables known to many housewives. Yet even the ochro is not used enough. The free and regular use of green vegetables and tomatoes, would make for better health in nearly every household.

RUM SHRUB.

A correspondent asked us (May Journal, 1909) to publish the recipe of Rum Shrub. We now do so :—1 gallon lime juice or seville orange juice ; 2 gallons proof rum ; 3 gallons sugar or clarified syrup. The acid juice must be strained and allowed to settle for 24 hours, as a lot of the thick pulp will come to the top and must be carefully taken off. The older the rum the better. Clarified syrup is preferable.—Supplied by M.E. Muirhead, Mandeville.

STOCK NOTES.

Take Care in Drenching Cattle.—More cattle die from the effects of being drenched roughly than is dreamed of here.

Perhaps the best way of demonstrating the danger of drenching cattle is to advise the reader to throw back his head as far as possiblė and attempt to swallow. This you will find to be a difficult task and you will find it much more difficult and almost impossible to swallow with mouth open. It is for this reason that drenching cattle is a dangerous practice. Therefore, if a cow's head be raised as high as possible and her mouth kept open, by the drenching bottle or horn, a portion of the liquid is very apt to pass down the windpipe into the lungs, sometimes causing instant death by smothering. At other times causing death to follow in a few days from congestion or inflammation of the lungs.

We are constantly receiving letters at this office describing the sudden death of animals that were ailing with such minor ailments as constipation or loss of appetite, and upon investigation find that they had been drenched and the cause of their death was due to same. This is oftentimes proved by sending out one of our assistant veterinarians to hold post-mortem upon such animals, only to find that a portion of the drench was still in the lungs ; other cases where death had been prolonged and later the animal had died of mechanical pneumonia.

We do not feel that the stock raisers of this country realize the danger in drenching cattle and the enormous financial loss brought about by same.—*Florida Agriculturist.*

[Same here. Plenty of pining and puny calves and meagre, unthrifty cows, have as the source of their trouble, a drench, or part of it, going down the wrong way.—Ed.]

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Over Stocking.—Beware of over-stocking ! This may be a platitude and the troubles arising from it may be well understood, but there are many that do not act accordingly. Rather see plenty of feed going to waste at times than run the risk of seeing your cows licking the bare soil to find something to eat. Even to the very wisest and most cautious there comes a time when things will not work out according to precedent. The unexpected always happens some time or other.

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The object of a recent experiment in Kent was to see whether cotton seed oil could be used as a cream substitute, *i.e.*, the oil to be fed with separated milk. It has been conclusively shown that cod liver oil forms a very economical substitute for cream when fed with separated milk, but cod liver oil possesses a disagreeable odour which is objectionable where the preparation of the calves' food takes place adjacent to, or actually inside the farmer's kitchen, as

fish oils. Cotton seed oil is free from all strong odour and is also cheaper, the price being 2/5 per gallon, against 4/6 to 5/- for cod liver oil.

The average live weights at the beginning and during the experiment were as follows :—

Lot 1.—New milk and linseed cake gruel. Average per head: At starting April 4th, 146 ; April 18th, 168 ; May 12th, 199. Increase for whole period, 53 ; increase per head per week, 9.6lbs.

Lot 2.—Separated milk and cotton seed oil : Averages per head : At starting, April 4th, 167, April 18th, 191 ; May 12th, 219. Increase for whole period, 52 ; increase per head per week, 9.5lbs.

The results show that the live weight increase per head per week was approximately the same in the case of the two lots, viz., 9.6 and 9.5lbs., respectively It is only fair to state, however, that two of the calves in Lot. 1 (new milk and linseed cake gruel) could not be induced to eat their full daily allowance of dry cake, otherwise the live weight gains in Lot 1 would probably have been slightly better than was actually obtained in the experiment, still such increased gain would have been obtained at a considerably greater cost as the table containing the cost of food shows.

Such good results with cotton seed oil have been obtained in this preliminary experiment, that it would appear this oil may form a useful cream substitute, though it is possible that it may not be suitable for young calves at that age (viz., two to four weeks old), at which a cream substitute should, from the point of economy, begin to form a part of the ration.—*Irish Farming World.*

[Many people now raise calves on separated milk, but few think of adding a little oil to make up for the butter fat removed and sold. Cod liver oil is dear and out of the question for us, cotton seed oil is cheaper, but alas ! we have no home-made yet, still we have better, and that is coconut oil used in the same quantity as cotton seed oil. —Ed.]

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ALL coarse feed, like hay, stalks, straw or coarse grass, is never eaten by cows when most people think it is. The bovine, sheep and goat of our domestic animals simply take it in their mouths and chew it a little until it gets moistened with saliva. Then it goes into their rumen (paunch), mouthful by mouthful, to be brought back again and chewed to make it fine enough to go to the second compartment of the stomach, where true digestion begins. If a cow takes corn in her mouth, she breaks it up in the first chewing and crushes some of the kernels. These are so small that they can't be brought up into the mouth to be chewed or mashed up, and they go on their way through the stomach and alimentary canal, as the gastric juices can't break up the kernel of corn.

HOUSEHOLD NOTES.

RICE AS A HOT WEATHER DISH.—The dietetic value of rice is too little appreciated by the average housewife, who regards it rather in the light of a makeshift dish to fill in gaps when other foods are not available, than as one of the most nutritious of foods, which in reality it is. It ought always to be borne in mind that though the fine, white rice may look nicer in a dish on table, the brown rice is ever so much more nutritious.

The white rice may be used for puddings and custards, but for use at breakfast or dinner, as it is so often used here, in place of or in addition to, potatoes or yams, or in that palatable and nutritious combination "rice and peas," the brown rice should always be used.

Owing to the fact that it is a sufficiently nourishing food without being heating, rice becomes especially valuable as a hot-weather dish and should enter largely into the family dietary.

Not the least virtue rice has to commend it to the notice of the housewife is the readiness with which it lends itself to the preparation of a great variety of attractive and palatable dishes. The appended recipes are only a few.

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RICE AND CHEESE.—Cook one cupful of rice according to directions for plain boiled rice, then add enough milk or rich white stock to make a soft mixture, also one-half cupful of grated cheese. Take off the fire, stir in a beaten egg and turn the mixture into a buttered baking dish, cover the top with grated cheese and stand in a steady oven until "set" and the cheese on top is a delicate brown in colour.

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RICE PORRIDGE.—Wash the required quantity of rice clean and soak over night in cold water to cover. In the morning drain, add slightly salted boiling water to twice cover the rice and cook until the grains swell and become soft. Then add sufficient hot milk to reduce the mixture to the consistency of porridge. Cook gently twenty minutes. Serve with cream and sugar or with butter. This is an excellent substitute for oatmeal porridge, which is too heating for summer consumption.

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RICE GRIDDLE CAKES.—To two cupfuls of cold boiled rice add one pint of sifted flour, one beaten egg, one-half teaspoonful of salt, two teaspoonfuls of baking powder and enough sweet milk to make the mixture of a consistency to drop from a spoon. Bake on a hot griddle and serve with syrup.

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RICE WAFERS.—Put two cupfuls of boiled rice through a colander: add one teaspoonful of flour, two teaspoonfuls of baking powder and salt to season. Mix three beaten egg yolks with three-fourths of a pint of milk and stir into the rice mixture: then add one

Bake in well-greased waffle-irons and serve with syrup or straine honey.

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A STAIN from cocoa or chocolate must be treated promptly Wet in cold water, then stretch over a bowl and pour boiling wate through. A chocolate stain that has been allowed to dry is ver hard to remove.

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MEAT will keep in the hot weather especially in the hills, fo many days if it is hung in a current of air and covered with a mus lin cloth which has been wrung out in vinegar. This should b renewed every day.

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TO CATCH FLIES.—For tangle-foot fly paper mix equal part of resin and castor oil with a dash of sugar or honey to tempt th flies. Spread on heavy paper and leave a margin for handling. Fo poison fly-paper, pour three quarts of water on a pound of quassi wood (our bitter wood) and allow it to stand over night. Strai and boil the fluid down to one quart. Put a quart of water on th same wood and boil until the water is reduced to a pint and mi the two infusions. In this dissolve from eight to twelve ounce of brown sugar. Pass any absorbtive paper through this fluid, drai and dry it and it is prepared for use. Thin blotting paper is a goo kind to hold the poison. A small piece of this paper placed in saucer and covered with water will prove an effective fly destroyer To catch mosquitoes use in place of or in addition to honey or sugar fowl's blood, or any other at hand.

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FOR TENDER FEET.—If your feet are inclined to be tender powder the inside of your stockings with boracic powder. Boraci fomentations are excellent for tender toe-joints and bunions, an are made by dissolving an ounce of boracic powder in boiling water and saturating a piece of lint with this when cold. The lint is lai on the joint, and a piece of oiled silk laid over to prevent evapora tion, and the whole bandaged to keep in place.

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BUTTERMILK AS A TONIC.—Ordinary sour buttermilk is a bette tonic, is a better food than was ever bottled or boxed up by th chemist or doctor. Buttermilk is a very hearty food. Two glasse a day is enough for any one. This should be drunk with meals, o else should not be taken within two hours of a meal. Time shoul be given it to thoroughly digest before anything else is taken int the stomach. It takes buttermilk considerably over an hour to di gest, and to drink another glass before the first one is digested i only to stir up difficulty with the digestive organs. Really, the bes way to drink buttermilk is with the meals, though it may be drunk

COCONUTS IN PORTLAND.

THE following report has been made to the Director of Agriculture, date 28th June, 1909 :—

I have carefully examined the coconut trees on the coast of Portland, and there would appear to be little disease in the western part of the parish, the disease or diseases increasing as one goes east.

The troubles most prevalent are "shrivelled top," "bud rot" and "weevils." These must be kept distinct from troubles caused by trees being planted in unsuitable land or situations, lack of cultivation, stifled by climbing weeds, etc.

The situation is practically identical with that in the western end of Jamaica in 1900 ; the remedy will have to be the same.

The first thing is cleanliness, the second thing is cleanliness. "Shrivelled top" may be microbic or fungoid, but that want of air and excessive moisture helps to spread the disease there is no doubt whatever. There is also no doubt that the disease spreads from one tree to another or to many others, and carelessness in leaving one diseased tree untreated, means the death of many others.

"Bud rot," too, is as yet undetermined, but the fact that it is a disease very liable to spread from one tree to another if steps are not taken to prevent it, is equally well established.

The symptoms of "weevils" attacking trees are so easy to discover that the most unobservant can easily note the reddish "water" running from the stems of the trees, and be ready to put the preventive measures in force at once. The watchword in dealing with all the troubles should be prevention.

Any trees observed to be below par, not "cleaning," *i.e.*, the dead leaves sticking on to the trees instead of dropping clean off, should be "singed," *i.e.*, fire set to the "strainer" on a nice, dry day, which has the effect of causing the dead leaves to fall clean off, destroying dead strainer and allowing the chief enemies of disease, sun and air, to have access to the stems of the trees and do their share of the preventive work. Care should be taken to prevent climbing weeds of all kinds from infesting the trees. This would appear to be at present the only really practical method of dealing with both "shrivelled top" and bud-rot.

It is not advocated as a cure for bud-rot, but a preventive measure. In the early stages of "shrivelled top," it would appear to be a cure, as it certainly is a sure preventive. The great thing is not to wait for symptoms, but immediately there is a tree seen to be unthrifty to treat it with fire ; many of these unthrifty trees drag along for years giving no returns, finally developing some disease which they spread to other and profitable trees ; cleansing with fire at any rate prevents this.

Cleanliness in a coconut walk is the surest preventive of the spread of diseases.

Destruction by "weevils" has not as yet assumed serious proportions, but it is on the increase, and the ignorance in dealing with

it is demonstrated in this parish, as I have lately observed trees being singed at the top as a cure for borers at the bottom.

On first observing signs of borers, *i.e.*, the reddish "water" running from the stems, apply to the stems of the trees a good coating of tar from the ground to a height of three or four feet above the highest sign of the work of the borers. Keep the trees under observation, and should any sign of activity on the part of the borers be observed, give the tree a second coating of tar. This is a sure cure, usually one tarring is sufficient to stifle the borers, but occasionally two are required.

A minor trouble which has been observed in Portland, has been described in the *Bulletin* of the Botanical Department, 1901, page 104. The nuts in this case are affected, developing husk only and no meat. In some cases, an odd nut or two on a tree is affected in this way, while in some cases trees produce nothing but the split nuts. The authorities of the New York Botanical Gardens reported "that no trace of fungus, insect, or bacterial activity could be found and that the trouble was probably due to defective fertilization," but I have sprayed trees affected in this way with Bordeaux Mixture, after which they have ceased to produce these worthless nuts. At Thompson Town, in Clarendon, a tree was treated which, I was assured, had never produced anything but meatless nuts although the tree must have been over 60 years old. The following year I had the pleasure of drinking water coconuts off that tree.—W. CRADWICK, Instructor.

WEATHER AND CROPS.

IT is a curious thing that with less total rainfall in most districts than we had last year, we have had better seasons for all crops up to the end of June. In last June, however, we had two days of heavy rain which carried us safely through July into August, and these showers took in the whole island. This year we had also a heavy rain from the sea lasting for twelve hours, but unfortunately it did not cover the whole island ; yet luckily it took in most of the dry lands along the sea coast, and so has done a power of good. It will push on young cane, develop young cocoa pods, expand the coffee berries, swell the young oranges. Taking into account the weather of last year, we did remarkably well with our exports, and this year for the first three months from April to June inclusive, we have done better. We have at last nearly made up the leeway in coconuts, and given even a few showers at all in the next three months, we should every week pull steadily up.

In cocoa we are likely to more than double last year's output. We have already exported 22,555cwt. as against 14,100cwt. last year, and in all cocoa districts at the present moment (beginning of July) the cocoa crop is in very much better condition than last year, where the trees are at all healthy. Looking to the greater propor-

and promptly any troubles noticed. This crop is so valuable that it would pay the country well to detail an Instructor for nothing else but to enquire into the troubles of cocoa trees and urge proprietors to deal with them and show them how to do so.

We have exported just over 1,000,000 more bananas in the last three months than during the same months of last year. We have also done a little better with oranges, but not much to speak of.

We have also done better with ginger, sending away from stocks in hand 11,691cwt., as against 10,481cwt. last year.

We have exported one-third less pimento than last year at this time, but what is exported at this time of the year is from stock held in the country, and very little was held, most of it being got off in case change of tariff in the United States should affect the market.

We have done wonderfully well in rum and sugar,—in fact even with the dry weather in Vere, most estates finished up with a fairly good crop, and in the last twelve months we have exported 912,156 gallons as against 539,549 during the same three months last year, and 800 tons more of sugar.

We have also exported 8,000lbs. more of cotton, but that is only a trifle unfortunately.

In logwood we have done about the same.

We have exported less coffee by 3,000cwt., but there is in sight a very fine crop indeed, if the dry weather of July does not tell on it.

We do not suppose that anybody—even the man in the city streets—ever took so much interest in the weather as he does now; to hear of heavy rain falling in the country makes everybody happy—except those who do not happen to get it.

SEASONABLE HINTS.

FOR the third year in succession we have had no May seasons, no heavy rains from the sea lasting over two weeks, intermittently, but heavy, and giving at least 20 inches of rain; that is what we needed, but we have not got. As June wore on without any June rains, only good local showers in some favoured districts, everybody began to feel anxious again about the weather.

Last year we had two days of unexpectedly heavy rain in June, which saved us from a bad plight. This year, almost at the end of June, we had twelve hours steady rain along the sea coast from three to five inches, but getting lighter as it got inland. It was unusually dry along the wet belt on the northside, from Port Maria to Port Antonio, and we have never seen that part on the borders of St. Mary and Portland, looking so dry as in June. Along the north coast the rain which was so heavy on the south side, was only from one to two inches. This rain, however, has been very fortunate, and will save us from the very ill effects that would otherwise have ensued from the dry, hot weather we usually get in July.

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NOT much in the way of planting can be done in July, but a great deal can be done to prepare for the great planting time of the year—15th August to 15th September. The great failing of small settlers as a rule is that they do not prepare their ground early enough, but wait till the rain is actually falling, and then make hasty preparation and a hurried planting. If, all over the island, they would copy the methods of the old ginger cultivators, they would in the end save expense and get far better crops. The experienced ginger cultivators turned over their land as early as October for planting from April to June. The soil is turned over in big

Even for corn where the land is not forked nor hoed right through, holes should be made either with fork preferably, or hoe, a month ahead; for yams too instead of digging the hills right away, the holes should be left open for a while. We have observed that men who did this got good returns from yams in a bad season, when their neighbours, who made their hills right away, had very poor results.

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CORN has been very expensive for the last three years, and most of what is being used is imported. The present price of country corn is from 5/- to 6/- a husbel. No one can feed stock of any kind profitably with corn at this price. We therefore strongly urge our *small settler friends to try to secure a good crop. If* they clean their land and make their holes a month ahead they will be sure to have better results than clearing and planting all within a week when rain falls. We *too often see corn planted in cloddy holes where the slightest touch of dry weather* burns the seed out.

It is hard to get it into people's heads that the softer and looser the soil is the *more it will stand dry weather. If it is loose and soft deep down, the moisture will* come up from below to the tender roots. Then again, the little roots can travel more quickly through soft soil and get so well established that dry weather does *not affect them much. But when the roots* have *only a little hole to move through* and then strike hard earth, they only grow well if they get plenty of rain to keep the earth soft. The same methods apply in planting peas and beans.

Another point we wish to bring before small settlers again, is the advantage of planting good seed. It has been proved over and over again, that large and heavy seed gives better results than small seed. A change of seed too, is very often, ad*vantageous, but not always.*

We will make arrangements to supply good seed corn at 4½d. a quart, post free. From four to six quarts plant an acre.

Those who are fortunate enough in having a very good field of corn coming on, should select their own seed by going through their fields and picking out all the strongest and best grown stalks, and if these carry one or two good cobs they should *take these, and after gathering all the best cobs in the field they should again select* the best among these. Then from these take the middle seed, rejecting the top and butt. At the top the seeds are small and at the butt they are irregular. The *same thing also applies in peas and beans. It pays a grower to go through his field* and pick out the most vigorous plants and take special care of the peas and beans on these for seed.

We *urge small settlers to plant as large a corn crop* as they *possibly can*, and take care of it, as at even half the present price it must pay well; and if they only till the ground well they can get safely through even a long spell of dry weather.

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GUINEA CORN.—We have urged people in the drier districts to try guinea corn. We send out any quantity, from a 3d. packet upwards, of red and white guinea corn. The seed is good because we have it growing vigorously now, planted in May and June. It is imported seed and sold at 6d. a pound, post free.

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PEAS AND BEANS.—Where plant bananas are late and small for the time of the year, they can be clean weeded out and a crop of cowpeas planted in August. *We have laid in a stock of cowpeas for the sake of supplying seed for green dress*ings, and unless there is a very much larger demand than we expect, we shall be able to supply all that is needed by the quart or bushel. Planted in the middle of *June, we see at this date a crop of cowpeas growing most luxuriantly and covering* the ground, although June is not usually accounted a good time to plant. In three weeks the ground had been covered, as they were planted close for this object.

BANANAS.—*If suckering has not been done before this time, it certainly* should be done now. We refer small settlers to our notes in June, and beg them not to let "greedy choke puppy," and attempt to grow three, four, or five suckers where *their land can only carry one, at least to make a straight bunch.* Very few we find realise how slowly ratoon bananas grow, and year after year they find themselves out of the season. If they aim to have their ratoons full-grown and looking almost *ready to shoot by October, they will strike the season pretty well with this fruit.*

Where bananas are crowded they are very slow to grow, and they keep each other back, even though the land is very fertile and the suckers are big and vigor*ous looking. Even when they shoot, the bunches are very slow to mature if they* are in dense shade. It will soon be time to think of the suckers for 1911. Those little stout suckers putting through the ground at the end of August in ratoon ban*anas, are those that will best strike the season for 1911.*

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COCOA.—*July is* a hard month for cocoa, as it is usually hot and dry and breezy also in the early part of the month. We notice that there is a very good crop of young pods on the trees, and barring accidents, almost every grower should have a good crop. Mulching should be the order of the day *in July* and August, where the soil is at all inclined to get hard and dry. In old plantations on the contrary where

assist in killing all the different grubs, and germs of disease, that lurk in the rotten wood. There is no better form of manure for young cocoa trees than wood ashes, but nearly all the old cocoa walks need lime, and if there are no drains through a cocoa walk then a great mistake has been made. In making drains caution should be used not to throw the earth around the stems of the cocoa trees but to spread it between the trees.

Any man who has cocoa trees not bearing well or dying back, or showing signs of disease in any way, should consult the Agricultural Instructor for his district or write to us.

* * *

COFFEE.—There is a very good crop of coffee in sight. As a rule very little care is taken of coffee, it is allowed to grow very much of itself. But it is a good crop for the small settler who uses his own labour and that of his family, and the majority we ask about it says it pays them well. But it would do better if it got more attention. In old coffee pieces it would yield much better if lime was spread underneath the coffee trees, and in most coffee pieces pruning is wanted; where the trees are too thickly grown together, every other one can be cut down to a stump, and a fresh shoot can be allowed to grow. When these rejuvenated trees commence to bear the other ones can be cut down.

* * *

ORANGES.—The comments we wrote in June can be re-read and the advice acted upon if not already done. We repeat here that orange trees are just as susceptible to horticultural art as any other fruit trees, in fact few trees respond so quickly to treatment. Large crops, large fruit, early fruit can be secured by intelligent work on orange trees.

* * *

VEGETABLES.—In last month's issue, we said that on another page we would point out the value of peas and beans as green vegetables for the table, but the article was crushed out, and appears in this JOURNAL. Readers please refer to it.

In the mountain parts vegetable seeds of all kinds can be grown in August, and in the lowlands peas and beans of all kinds except "English" green peas, and spinach, tomatoes, garden eggs and raddish. Parsley can always be had for flavouring if grown in a box. There is not a house that could not thus have its supply of fresh parsley, which is unequalled for garnishing. We have fresh seeds in stock.

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PIGS.—We have had letters from different parts of the island telling us of many pigs dying of some disease. From Victoria Town in South Manchester, for instance, we are advised that the pigs of no fewer than thirteen persons died during two or three weeks, within a radius of three-quarters of a mile, and also from Bullhead district. Unfortunately, it is seldom that a description of the trouble is sent, and a statement of the conditions under which the pigs are kept—that is, whether they are kept in pens or tied out, or run at large, and on what they are fed.

It is always safe and simple to give a dose of from three to four tablespoonfuls of castor oil with a teaspoonful of jeyes in it. This must be given as a drench, as the first symptom of sickness in a pig is the refusal of food. To drench a pig is not an easy matter, but if an old boot is taken and the toe cut off and inserted in the mouth of the pig, which is easily done, the medicine can then be poured down into the back of the pig's mouth and then it will go easily down the gullet. The most important thing is to keep the pigs on clean ground in a cool spot and feed on plenty of green stuff. A handful of charcoal, or failing that, wood ashes, in the pig's food every day, is a very beneficial medicine.

COMMENTS.

ANTS AND WEEVILS.—Has anyone noticed that stinging ants are the enemies of weevils in corn or peas? We have noticed ants carry the pests away, and we think they eat them. This is worth the observation of readers of the JOURNAL.

* * *

TO CORRESPONDENTS.—Some correspondents omit their post office addresses, some sign their names so that they cannot be deciphered, although their writing otherwise may be plainly read. When a lady writes she should put (Mrs.) or (Miss) in brackets before her name. When a professional man entitled to the prefix Dr. or Rev. writes, he should put his title in brackets before his name. However, now that printing is so cheap, everybody should get his or her name and address printed on their letter paper, and this will probably save a good deal of trouble to themselves as well as others.

Foot and Mouth Disease.—The severe form of trouble tha affects the mouth and feet of horsekind, is still prevalent in som parts of the island. and in spite of the publication in the Journai for May, of the various forms of foot and mouth troubles affectin horsekind, and the treatment that has been satisfactorily used in th suppression of all the forms, many people are unaware still of th necessary treatment. It is surprising how apathetic people can be They know this office is here to give information, but very ofte they potter along attempting to treat a disease utterly strange t them, with rough and ready methods, until somebody comes alon accidentally who recognises the disease and writes to us about it. This has occurred over and over again.

We beg all readers to let us know of cases of any severe foot and mouth trouble. There have been many deaths from the malignant form, where the hoofs slough off, outside of St. Mary, where it apparently first occurred. Horses of great value to their owners have died, which if promptly treated might have been saved.

We beg to again attract attention to our article in May Journal.

Shortly, sore mouth should be washed with chlorate of potash and water, and doses of chlorate of potash given daily for a few days, followed by a good condition powder containing sulphate of iron. When symptoms of swelling are seen in the legs and feet, they should be bathed with acetate of lead and water,—one ounce of acetate of lead (which can be bought from any dispenser) in a quart bottle of water; and whenever any wounds appear on the coronet, boric acid powder should be used, dusted well in. All animals attacked should be kept strictly separate from other stock.

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Alfalfa or Lucerne.—This is the most useful of all forage crops in all dry countries, yet has never been grown in Jamaica on a scale large enough to be of any practical use. It has been demonstrated by ourselves and others that it can be grown and last fo several years, but this is only in an experimental way. It has neve been grown in fields and used for stock forage. We do not, however, give up hope that we shall yet strike the right kind of seed, the right time of the year, and the right method of handling for ou conditions. There never has been a thorough test carried out long enough. Where the seed was raised is no doubt a bigger facto than has been considered. An acclimated seed may do best. Anybody, however, wishing to try Alfalfa again can be supplied fror this office at the rate of 6d. per lb. Seeds from two different localities, the Central States and California.

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California Seed.—We have received from California a supply of Alfalfa and Sorghum seed, which sell at 6d. per lb. post free; and seeds of plums, apricots, peaches, a few of which we can send to anyone who has land in the hills, say over 1,600ft. to try tc

COTTON.—"We shall make a short sugar crop in several districts of the island, owing to the partial way in which the rain fell last year.

"Cotton will not be a great success either. We want a much more hardy plant and one that will give a larger return per acre, than the present Sea Island we have, even if we get a less fine staple. A cotton that will give us 800 or 1,000lbs. of seed cotton, selling at a few pence less than the finest Sea Island, will pay us better."—BARBADOS CORRESPONDENT.

When I wrote the first time *re* cotton, I stated I was never troubled by cotton insects; since then I have to contend with greater enemies in droves of little birds which have at last found that cotton is better than straw to build their nests, and so are robbing my garden of the soft down as soon as the pods commence to open.—M. J. CHAMBERS, Pisgah School, Springfield.

We can supply Sea Island seed and Egyptian seed at 3d. per lb.

The Society is prepared to supply seed and pay the cost of small cultivations of cotton, say a square chain, on any small settler's land in the plains of St. Elizabeth, or along the north coast-line from St. Ann's Bay to Montego Bay. Planting shonld be done between 15th August and 15th September, the earlier the better. Any small settler wishing to take advantage of this chance should write the Agricultural Instructor or to us.

When the agitation for growing cotton within the Empire to a larger extent, with the final aim of supplying all the needs of manufacturing Britain, instead of being to a large extent dependent upon the United States for supplies, was begun, it was represented, and we daresay with entire sincerity, that Lancashire Mills would take all the cotton, and Sea Island cotton at that, that the West Indies could grow, that more looms would be put in to deal with this fine cotton if certain supplies were forthcoming, and these supplies would be taken at a good price. Spinners stated that they could not expect supplies unless the price showed a margin of profit to growers.

The West Indies did well under difficulties—all except Jamaica—and sent in very appreciable supplies of fair quality. But if Jamaica has been slow to respond, it is because we have so many other articles of export, and have not been under great pressure to find another export crop like those islands which depend upon one or two crops for a living. Yet we have districts to which cotton would be a valuable asset if it were grown. Although we have been slow to take up cotton growing with any zeal and system, still we believe we would have come on in time.

But the price has dropped to 1/- a pound from the estimated and expected 1/6, and West Indian growers are not making much of their efforts and enterprise at that low figure; considering all the troubles that have to be tackled in growing their cotton.

Fortunately no place in the West Indies is very dependent upon cotton, and unlike sugar, we do not think there will be the same struggle to grow it under depressing circumstances. If cotton growing cannot pay a reasonable margin in the West Indies, it can be

done without, although that would be unfortunate both for Great Britain and for the West Indies.

This year the few cultivations of cotton in Jamaica have done well, not a full crop, but in spite of long continued drought, very promising returns indeed.

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SUBSCRIPTION.—Some members of the Society appear to appreciate it and its JOURNAL. We have received more than a few subscriptions pre-paid for four and five years ahead! Several of these are from foreign members.

We would remind our members that the subscription is due on 1st April of each year. We know that it is not through unwillingness to pay the small fee of 4/- that prevents us getting in subscriptions promptly, but the trouble often is in getting a postal order just when the matter is in mind.

Those who have bank accounts can pay by cheque even though the sum is so small.

There are scores of agriculturists who are not members of this Agricultural Society—yet they sometimes write us for information. They apparently do not believe in co-operation, combination, or organization, in their trade. The insignificant membership fee of 4/- covering as it does, three shillings' worth of AGRICULTURAL JOURNALS, is astonishingly cheap.

* * *

SHOWS.—On 2nd August St. George's Branch holds their show at Buff Bay. This bids fair to be a great show, and has been organised in a very complete and systematic manner. Special trains have been arranged for as per full advertisements in the newspapers. A full equipment of helpers has been arranged for. This is often done at shows, but the promised help very often is not realised on the day of the show. Buff Bay Committee, however, are taking particular care to get reliable assistance. His Excellency the acting Governor will open this show.

On 5th August Port Royal Mountains have arranged to resume the holding of their show after a lapse of years. This show was originally held up in the mountains, but for some years was held at Hope Gardens, where it also performed the functions of a Kingston show. It is now being held in the mountains again near Mavis Bank. There is now a driving road right up to Mavis Bank, and this is being taken on to the show grounds.

On 12th August Hector's River Branch arranged to hold their show, but owing to the sudden death of the Vice-president, the Rev. Mr. Swift, the Committee has out of respect, agreed to postpone the show.

BRANCH NOTES.

Porus (Clarendon).—A postponed meeting of this Branch was held on the evening of the 14th June, 1909, in the usual place. At roll call, Rev. W. B. Esson, President, S. A. Hendricks, Esq., J.P., Vice-President, Messrs. V. N. Magnus, D. Crosbie, L. Hylton, C. S. Morris, assistant

Secretary and 16 other members, answered to their names. Among the visitors were Rev. Crawford, of Broadleaf and several ladies. The minutes of last meeting were read and confirmed. It was suggested by Rev. Esson that taxpayers who have a vote, should see that their names be placed on the voters' list. A paper on Rotation of Crops, was read by Mr. V. N. Magnus. A vote of thanks was accorded Mr. Maguus on motion of S. A. Hendricks, Esq., seconded by the Rev. Crawford, supported by W. T. McPherson and agreed to. The President suggested that Mr. Magnus' paper be sent for publication in the JOURNAL and he hoped that every one would be benefited by the reading of the paper, and that the next paper should be on the soil, which was agreed to. It was moved by Mr. D. Crosbie, seconded by Mr. V. N. Magnus and agreed to, that Mr. L. Hylton prepare the paper for next meeting. The debate on the large proprietors and peasantry was next argued; it was moved and agreed to that Rev. Crawford be asked to take the chair, which he has kindly consented to do. At the close of the debate the assistant Secretary read an address to the President, Rev. W. B. Esson, acknowledging an appreciation of his services among us and wishing him and his family *bon voyage* whilst they go on furlough to Scotland for six months. He replied in his usual way. Not for the praise of man but to do the work in a manly way; and he said he is not a man to run away from work but to return and fight the battle, and thanking the members for the way they appreciated his services hoped he will return in time to help with the show, which is to come off on the 30th of December next, and he wished the Branch God-speed.—C. ROWLAND, Secretary.

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Springfield (St. Elizabeth).—A special meeting was held on the 4th June to frame the resolution that was suggested at the last meeting held on the 30th April re the grievance of the fruit growers, caused by the recent Fruit Combine at Montego Bay. Present:—Rev. J. A. Jones. President; J. Jacob Irving, Esq., Vice-president; J. J. Ellis, R. Mason, A. Stephen, A. J. McLaughlin, A. McLaughlin, and W. Service, Esqs. In the absence of the Secretary, J. Jacob Irving, Esq., acted. The circular from the agents of the Fruit Combine was read, and after a careful discussion, the following resolution was unanimously adopted to be presented to the parent society, viz., "That through the recent changes mentioned in the circular which is enclosed, much inconvenience is experienced by the growers which tends to do serious harm to the fruit trade, as the growers get dissatisfied at the present state of things. Prior to this change, the growers could dispose of their fruits conveniently at certain centres, but these centres have now been cruelly cut off. The determination of the companies not to purchase fruit from any person taking out his own license, has also deprived the Government of a certain amount of revenue, and also prevented many from making a livelihood who were otherwise making a living in this direction for years. Whilst this circular sets forth that it is for a better state of the fruit trade, this resolution begs to state that it is no such thing, it is otherwise; for now persons who have no means of conveyance must travel from five, six, and even ten miles with their fruit on their heads to the Company's depots, and those who cannot must have their fruit left in the fields to rot, whilst it pleases the different companies, the growers suffer terribly. The people of this district join in protesting against this selfish state of things, and we of the Springfield Branch beg to place this grievance before the parent society to see what steps can be taken to remedy this evil."

P.S.—Delay due to meeting being kept back to have the President's presence at the framing of resolution. Ed. Foster, Esq., of Montego Bay, has again reported his not receiving JOURNALS.

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Cedar Valley (St. Catherine).—The monthly meeting of this Branch came off on th evening of 20th May. The following gentlemen were present:—Rev. J. N. D Gordon, President; R. Campbell Clarke, Secretary; Alex. McKay, Treasurer; Isaac Rose, Augustus Grant, William Thomas, T. Ramakie and Henry Walker. After the minutes were read and confirmed, the President rose and congratulated the members who had got prizes at the Bogwalk Show. The following received prizes:—Alex. McKay, 1st prize, tobacco, jackass rope; Alex. McKay, 2nd prize, coffee; William Henry, 1st prize, rope; Wilmot Henry, 1st prize, leaf tobacco; E. J. Fletcher, 1st prize, heifer. Other members of the community, David Walker, 1st prize, bowl; Mrs. Susan Brown, 1st prize, coconut oil; Mrs. Susan Brown, 2nd prize, prepared cocoa; Miss Rebecca Brown, 2nd prize, coconut oil. The Prize Holdings Competition formed the principal topic of the evening. The Chairman outlined the scheme and showed the benefits to be derived, and denounced the notion that the Government's eye is on that of raising taxation. Many are still head-

Although slowly climbing, we are on the upward move. Our new Post Office was opened on the 25th May. We congratulate Miss B. F. Fletcher to be appointed the first post-mistress. She is not many weeks old in her new appointment, and already she has given satisfaction.—R. CAMPBELL CLARKE, Secretary.

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Santa Cruz (St. Elizabeth).—It has now been definitely settled that the agricultural show in connection with this Branch will positively take place on the 9th November next. The members of this Branch have shown keen interest in matters agricultural, and it is hoped the show will be a success. Arrangements are being made for its proper working, and as our President is one who has the full knowledge for running a show, we feel implicit confidence in his leading. The Society is a broad-minded one, very liberal and friendly. It has given the option of sending exhibits on the day to the world. Mark well! exhibits can come from England, America, the Continent, and anywhere. The Managing Committee would like to make it a mammoth show—a miniature exhibition. The Society takes the opportunity of inviting those who have experienced this sanatorium of health to come again on the day, and be fanned by the cooling zephyrs of our mountain climate. As for those who have never come, take the opportunity of doing so on the ninth November next, and we can almost vouch that you will return braced up in body and mind to tackle your laborious work again. Take some exhibits along with you and carry away the prizes from us, and we are just the ones to congratulate you for your success. Circulars for subscriptions will soon be issued, so if any one would not like to be taxed with them, send your subscription at once to the Treasurer, Rev. S. C. Ashton, Malvern P.O., and you will get an acknowledgement without any further trouble. Definite information respecting the show can be obtained from THE SECRETARY, Santa Cruz Mountain Show, Malvern P. O.

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Deeside (Trelawny).—The regular monthly meeting was held in the Hastings schoolroom on the evening of the 8th June. There were present: J. A. Foote, President, the Secretary, and six other members. The minutes of the last meeting were read and confirmed. One of the items arising out of the minutes that came up for discussion was the holding of day meetings quarterly, in order to meet the convenience of the majority of the members, and to awaken their interest by inviting a few of those outside the district to attend and give us some of their ideas on matters agricultural. The Secretary reported that at the last monthly meeting it was agreed that the matter be dealt with at a special meeting. The date was fixed, and circulars were issued calling a meeting, but as only very few of the members responded to the call, the matter was left over for a subsequent meeting. The President thought that the matter should not remain over any longer, and that a definite decision be arrived at by the members present. After some discussion it was moved, seconded and carried unanimously, that the Society hold quarterly day meetings, and that the first meeting be held on Friday, June 18th, commencing precisely at four o'clock p.m.; the next to be held during the month of September. The appointment of speakers for the first meeting was the next matter dealt with. When it was decided to ask the following gentlemen to speak:—Rev. W. J. Dewdney, Adelphi P.O.; Messrs. A. B. Lowe, Adelphi, and S. G. Rust, Falmouth, all of whom are members of the Society. It was further suggested that the rev. gentleman be asked to speak on "The benefits of an Agricultural Society and the value of co-operation;" Mr. A. B. Lowe on any agricultural subject. Mr. S. G. Rust had already intimated his desire to speak on the "Fruit Industry." The Secretary was instructed to write to the General Committee mentioned, inviting them to attend the meeting. The matter of starting the hat class was deferred for the next meeting, when a large number of members would then be present. A few questions re the working of the experiment plot were asked by the members. The Irish potato crop has been disappointing, owing principally to the lateness of the time in planting. Each member present promised to plant one hill of yam on the same spot where the potatoes were cultivated. The President remarked that as yet none of the members had expressed a desire of competing for prizes for the best holdings, and expressed the hope that they will make some attempt in that direction. There being no other business, the meeting was brought to a close.—R. R. McBAYNE, Secretary.

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Deeside (Trelawny).—The first quarterly day meeting was held in the Hastings schoolroom, on Friday afternoon of the 18th June. There were present: Mr. J. A. Foote, President, in the chair; Messrs. A. B. Lowe, B. Cousley, R. Roche, D. Clarke Jno. Davis, J. Carey, J. W. Clarke, J. Morgan, Mrs. C. Davis, Mrs. J. Plummer, and the Secretary. There were also a couple of visitors. The meeting was opened with prayer by Mrs. R. Roche, after which the minutes of the last meeting were read and confirmed. The Secretary reported that he had issued circulars to all the members in the neighbourhood, giving due notice of the meeting, and asking them to attend. He had also written to the gentlemen that were appointed at the last meeting to give lectures. The Rev. Mr. Dewdney, one of the speakers asked, and with whom he had a personal interview, expressed his regret at not being able to be present, owing to a pre-engagement, but promised to attend on a future occasion. The other gentlemen, viz., Messrs. A. B. Lowe and S. G. Rust, the former being present, had written stating their willingness to attend. The President pointed out

fere with the monthly meetings of the Society. The first item of business that came up for discussion was the starting of the hat-making class. The Secretary suggested that a final effort should be made in doing something in the matter, as it had been under consideration for a long time, and urged that some definite arrangements be made at that meeting by way of making a start. A few questions were asked by the members re the getting of a competent person to carry on the instruction, etc. The President stated that he had partially engaged a young lady to do the work, but did not make any agreement as to wages, etc. After some discussion, it was decided that a subscription list be opened and subscriptions solicited generally, each member to contribute one shilling. The amount thus raised would be utilized in defraying any initial expenses that may incur as well as forming a kind of reserve fund to help in the undertaking. One visitor promised to give a shilling to the concern. In the meantime other arrangements in the matter will be made. The next item of business was an address by Mr. Lowe. The speaker in the course of a very interesting, practical and helpful speech, impressed upon all present many useful lessons which, if put in practice, will be productive of good results. He gave some very valuable hints in the cultivation of bananas, and spoke of the progress the industry is making in the neighbouring parish of St. James, and that proper cultivation and attention are necessary to ensure the best results. He referred to the cultivation of chocolate, cocoa, and thought the people of the district should do more in the growing of it, the soil being adapted to its cultivation. In conclusion the speaker encouraged the members present to co-operate and help one another as much as they can, and prosperity will be sure to follow. Mr. Lowe was heartily thanked for his lecture. There being no other business, the meeting was adjourned until the 6th July, 1909, the date on which the next monthly meeting will be held.—R. R. McBAYNE, Secretary.

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Comfort Hall (St. Elizabeth).—A very lively and interesting meeting of this Branch came off on Monday, 17th May, with the President in the chair. The Instructor, Mr. J. T. Palache, was also in attendance, besides the senior and junior Vice-presidents, Treasurer, assistant Secretary, and over twenty other members, besides visitors, which went to make a fair and representative gathering. The lecturer (Mr. Palache) then proceeded to give satisfactory reasons for his absence from this Branch, for some months past, and then addressed the meeting on the existing thrown-up condition of the roads in this and other parts of North-western Manchester. A petition from this and two other neighbouring Societies, will at an early date be forwarded to the Parochial Board, again calling their attention to such a great drawback to agriculturists, the backbone of Jamaica. The petition will show, among other items, the large surplus fund to this end, and our claim of right from the very small pauper roll in our midst. Members from the Mahogany Grove and Breeze Hole districts, again renewed their promise that should their request be granted of a bridle track through the above named districts, they are quite willing to give the lands free, provided they be compensated in case of the taking down of any building, wall, fence, valuable trees, etc. The lecturer otherwise gave many encouraging and helpful suggestions, besides promising that any member desirous of visiting his garden at Clover, it would be his pleasure to give them such plants as were at his disposal. In closing his address, he said he cannot but from time to time appreciate the attendance and interest manifested at this Branch. By special request he was asked to speak on the Agricultural Loan Bank, and after going into details at the close, Mr. J. W. Lalor emphasized the good that would be forthcoming under proper management, when a committee was appointed to consider and report on the subject at an early date. Then followed a healthy and interesting discussion generally for some time on many subjects. Moved by the President and seconded unanimously, a hearty vote of thanks was then accorded the lecturer, who replied warmly, remarking again how pleased he was to attend this Branch, when he left for Balaclava Branch. Other business of the Society having been gone through, the President declared the meeting adjourned for the 19th July. The mango crop is now in. A very large one indeed. If seasons continue, the coffee crop will be very much larger than the preceding one. Cultivation seems to be the topic of the day here, and viewing around, there are signs of prosperity.—D. S. WILLIAMS, Secretary.

[Not received until June 9th, and so too late for JUNE JOURNAL.—ED.]

Metcalfe (St. Mary).—The monthly meeting of this Branch was held here on Wednesday, 16th June. The following members were present: Joseph Kelly, Esq., Vice-president, in the chair; and eleven others. Mr. Alexander Thompson, Mrs. Samuel White, of Healthy Hill, and Mr. Grant, of Stony Hill, in St. Andrew, were visitors. At this meeting J. Briscoe, Esq., Agricultural Instructor, was present, and gave a very interesting lecture touching on various subjects, viz: Sanitation, Planting of Cocoa, Foot and Mouth Disease, Mulching, and the Folly of Running Fire over land being prepared for cultivation. Mr. Briscoe suggested that the Treasurer should lodge the Society's money in the bank as early as possible. At one of our meetings some months ago, the question of small stock was put before the Board. The goat is considered very profitable, but the kind we have is rather small and undeveloped. A good imported billy would be serviceable to improve the breed. Members are availing themselves of the opportunity of securing cocoa plants given away freely from Castleton Gardens, by the Government. The following members each had a supply: Messrs. James Mallet, George Hamilton, Emanuel Davis and E. Scott. The visit to this meeting of Mr. Briscoe is the third one. At his second visit practical instruction was given on cocoa and other subjects in the fields of Messrs. S. White, Norman, G. Hamilton, and R. Ryan. At this meeting the result of a lecture given some months ago on Juice Grafting of Banana, to the Society by the Secretary, was brought forward as a testimony to the truth. It is also observed that of late the JOURNAL never reaches us until late in the month following. The roads in this district are in so miserable a condition that most of the inhabitants are getting discouraged. We are about to establish a penny bank and a co-operative society, with the intention to encourage thrift among our people. A good supply of pumpkin seeds was given to the members in May by Mr. Briscoe, received from the parent Society.---S. C. SCOTT, Secretary.

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Fair Prospect (Portland).---The usual monthly meeting was held on Saturday, the 5th June, when there were present the President and Vice-presidents of the Society, Treasurer and Secretaries, Mr. W. Cradwick, Travelling Instructor, and a few dozen members and visitors. The minutes of last monthly meeting were read and confirmed. The first five or six items on the agenda were strictly confined to members, after which the meeting was thrown open to the public. Business arising out of the minutes were dealt with. Mr. Elworthy, in reply to a letter received from the Society, stated that his interest has not in the least flagged, but rather that it is deeper. Messrs. Brown, Munroe, Buckley and Rev. Moodie spoke and the matter dropped. The Secretary, one of the two delegates appointed at last meeting to settle up matters with Mr. H. Lawrence *re* an outstanding account of some considerable time, recommended that the Society pay the gentleman an amount of 6/- in cash and allow his subscription fee to remain as being paid up to the Society's financial year 1911. This was unanimously agreed to. The Treasurer presented his financial report, which showed a balance in hand to the Society's credit of £2 2s. 9½d. Passed with thanks. The Treasurer of the penny savings bank presented also his report, which showed that the bank, though not two full months old, has 47 depositors, with an amount of nearly £4 deposited, with a growing interest evinced every week. This was satisfactorily received. The following notice of motion from last meeting put by Mr. W. A. Ellison, seconded by Mr. John Burke, was dealt with and passed: "That this Society purchase half-a-dozen forks, which can be hired out to members of this Society at a reasonable rate, which will greatly relieve the very great difficulties now being experienced by members who may not be in a position to purchase for themselves, but are yet in need of their use." Mr. Cradwick was pleased to find out that the use of the fork in the district was becoming such a common one, and promised the Society that he would himself on going to

Kingston in a couple of weeks hence, select the very best forks he can for the Society, for which he was greatly thanked. The following motion put by Mr. L. A. C. Brown, seconded by Rev. S. J. Moodie, was passed: "That the Board of Management of the Jamaica Agricultural Society, do consider the advisability of procuring ways to enable the Travelling Instructor, Mr. Cradwick, to establish a demonstration plot under the auspices of this Branch in this district, for the purpose chiefly of demonstrating to settlers the proper methods of cultivating the crops, notably bananas." This was intended to strengthen the hands of the Travelling Instructor, who had himself promised to approach the Society on the subject. The last motion put by the Secretary, and seconded by the President, was agreed to: "That the Director of Agriculture be written to through the Secretary of the parent Society, asking him to kindly forward a supply of seedling canes suitable for this district for experimental purposes." The Instructor, who had been called upon to give an address, on rising said, he was glad to be again present at this meeting of the Society, and immediately asked whether the Society could see its way to changing its date of meeting so that he might be able to attend every week a meeting of the Branch Societies in Portland. The Society, after consultation, agreed that henceforward the regular monthly meeting of this Society, will be held on the third Saturday in every month instead of the first as heretofore. The next meeting will then be on Saturday, July 17th, to which the attention of all members is particularly drawn. The lecturer congratulated the Society on the starting of the penny bank, as also on the freer use of the fork in the district. Much was said about the oncoming shows in the parish, notably that of St. Margaret's Bay Branch. Mention was also made of the Small Holdings Competition. The lecturer spoke on the nutritious quality, etc., of banana meal and wondered why it was not more largely used. There were some questions asked and answered about cocoa. Mention was made of ginger. A light and shotty soil was considered not good for the cultivation. The following new members were elected:—Mr. John Dias and Mr. Ernest R. Wallace, both of Priestman's River P.O., and Miss E. A. Scott, of Fairy Hill, Port Antonio P.O. The Instructor spent the week in the district and the following places were visited: Black Rock, Islington, Hartford, Milford, Windsor Forest, Elmwood, Long Bay, Rural Hill and Fair Prospect. The visit was productive of very much good to those who took advantage of the opportunity. The season still remains good for the cultivators. The price of bananas is slightly reduced, but in all a very fair supply is being turned out weekly from this district. A portion of the Hartford New Road is now being worked, to the great joy of many.—Z. E. Buckley, Secretary.

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Giddy Hall (St. Elizabeth).—Two meetings have been held this month. The first meeting had, unfortunately, been fixed for Friday, June 4th, before we received a letter from our Instructor, J. T. Palache, Esq., saying that he would be with us on the 16th inst. It was inadvisable to postpone the first meeting; we decided then to hold two. On June 4th, there were present the Rev. John Maxwell, Messrs. F. B. Brown, C. F. Thomson, J. M. Cooper and others. The question of the distribution of the prize money in the late Prize Holdings Competition was brought up. It was pointed out that Richard Salmon, with a second prize, gained less money than Simeon Rowe with a third prize, in the same class. As it was learnt that the Secretary had already written about the matter, it was decided that nothing could be done on this occasion, but the members hope that in future in case of a tie, the money will be more fairly divided. The next subject discussed was scale on citrus fruits. Mr. Power pointed out that this disease was on the increase. It was felt to be a serious matter, and various sprays and washes came in for consideration. The lime and sulphur wash recommended by the Agricultural Journal, seemed

D. Henderson and Co. to enquire the price of ground sulphur in bulk. Mr. Walcott mentioned that he had found the plant called "leaf of life," *covered with scale insect, also the castor oil nut. The members could not* agree as to whether this was the same scale that is destroying our citrus trees. It was decided to make the meeting a short one as Mr. Palache was expected on the 16th instant.

The second meeting was held on Wednesday, June 16th. A heavy shower of rain prevented many of the members from being present. In the unavoidable absence of the President, the Vice-president, O. E. Tomlinson, Esq., took the chair. As arising out of the minutes of the last *meeting, Mr. Palache recommended kerosine and lime emulsion,* as cheaper than the sulphur wash, for scale on citrus trees. He also promised to send the Society some pamphlets on citrus culture. Mr. Tomlinson then called upon our Instructor for his lecture. The subject was "Soil *Preparation:" and the gist of it was as follows: In Jamaica, the* people will wait until the rain actually comes before they will begin their preparations for planting; thus much valuable time is lost. If farmers in other countries acted in the same way, they would starve. Jamaica is so greatly blessed by nature, that the people take too little trouble. In America there are only 21 days in the year for planting corn. In Jamaica there are nearly six months when we can plant. Yet America can undersell our corn. We import corn every year to the tune of £57,000. Then, how many different kinds of crops our soil can produce. In the Aberdeen valleys you will find coffee, pimento, cane, bananas (the chief exports of Jamaica) breadfruit, and many other kinds of fruits. Our soil, our climate, are capable of producing nearly all we need; and yet we pay every year £500,000 for imported foodstuffs. This does not include money spent for wheat-flour; we must import that, we cannot grow wheat. But why do we import corn, beans, pork, beef, saltfish? If this money were saved what purchasing power we would have for clothes, boots and shoes, improved machinery, etc. All that is needed is attention to proper methods of cultivation, we want more knowledge. Money saved is money earned. It is not the man who makes the most money who is the richest. If we saved this yearly expenditure, in 10 years we would have saved five million pounds. Agriculture will build us up and advance us. People are too fond of talking of hard times. The Government tries to do its best to help the people, but how few care to improve. In the Prize Holdings Competition, it is not the mere winning of the prize that counts, it is the efforts made, the improvements attempted that make the competition valuable. The man who obtained the highest marks in the last competition lives in the heart of the dry district; but he had taken advice, he had manured, he had mulched, and what was the result? He obtained 97 marks out of a possible 100. The Education Department offered prizes for the best schoolgarden; a garden in Southfield, in the dry district, gained the prize. Our holdings and homes should be our savings banks; every moment that we have to spare we should be planting something. Nature will multiply tenfold. Zeal and hard work will be rewarded by independence, peace and content. After a vote of thanks to Mr. Palache for his fine lecture, the meeting was closed with the Benediction.---(Mrs.) G. L. MAXWELL, Secretary.

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Bull Head (**Clarendon**).---This Branch met at Mt. Carmel on the 3rd instant; this being our annual meeting. The Rev. A. A. Barclay was in the chair. After the reading and confirmation of the minutes of the last meeting, the house proceeded in electing members for the ensuing year. It was unanimously agreed that the Rev. A. A. Barclay be the President for the year, which he willingly accepted. Vice-chairman, Mr. T. Robotham, second Vice-chairman, Mr. Edwin Wright, Secretary, Mr. J. N. Simpson, Treasurer, Mr. W. P. Wright. A secretary for each district was next appointed. Mt. Carmel District.--Mr. Armstrong, Messrs. Edwin Wright

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N. Simpson, the dual office of Chairman and Secretary for Brandon Hill. The matter *re* the jippi-jappa industry was brought forward; but after discussion the Secretary was asked to write Mr. John Barclay as to how plants could be obtained. The lectures on "The Future of our Girls," and "Drainage," were postponed for next meeting. Members are kindly asked to pay in their annual subscription to the Secretary of each district. After the discussion of some useful matters *re* agriculture, the meeting was brought to a close.---J. NATHANIEL SIMPSON, Secretary.

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Roses Valley Sub-Branch, Balaclava (St. Elizabeth).---We have continued well since we started and a good interest is kept up all the time. We have had several meetings at which Mr. J. T. Palache lectured on the cultivation of such crops as coffee, annatto, cocoa and garden vegetables, as well as on other matters affecting the welfare of the small settler. The last meeting was held on the 18th May. In the absence of the President, the Secretary performed the dual office of Chairman and Secretary. There were present ten other members and Mr. Palache, (lecturer) who spoke on cocoa and cassava and on the benefits of co-operation. A good time was spent and all the members went home with new resolves. Our next meeting will be on the 20th July.---S. E. JENNINGS, Secretary.

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Spanish Town (St. Catherine).---A meeting of this Branch was held on the 21st June, the President, the Rev. W. Clarke McCalla, presiding. Fifteen members were present. The minutes of the last regular meeting were read and confirmed. As arising out of the minutes, a letter was read from Mr. E. J. Wortley, acting Superintendent Hope Gardens, *re* the Foot and Mouth Disease. This was directed to be entered fully on the minutes of the evening. Still the Secretary was directed to enquire of Mr. Wortley as to the dose. *i.e.*, two drachms sulphate iron twice a day, a total of four drachms per day; many members being of opinion that it was too heavy a dose. The Treasurer not being present although notified that his continued absence was not satisfactory, it was finally decided by vote that his office be declared vacant. The meeting decided to elect some one to fill the position at the next regular meeting. As per agenda, at this stage the President addressed the meeting, pointing out the necessity of each member doing his best for the advancement of the Branch. He particularly referred to the cultivation of cassava and its future prospects. Continuing, he mentioned having interviewed Sir James Alex. Swettenham, who advised that each and every one should do something in the way of agriculture, as this would tend to the general betterment of this country. A vote of thanks was tendered to the President and he was requested to thank Sir J. A. Swettenham for his encouraging advice. Mr. C. Thompson spoke on the difficulty under which small settlers suffered in the way of obtaining water from the irrigation, yet had to pay rates. He thought the Government should be approached so as to have the law altered to allow the irrigation to be taken through any land provided no damage be done to such lands, and moved a resolution to be discussed at the next regular meeting to this effect. Continuing, Mr. Thompson spoke on the ruthless destruction of the small settlers' goats by employees of the Public Works Department, and moved the following resolution: "That the Government be asked to amend the Pound Law so as to allow of the same protection being provided for goats *re* trespassing as is provided for sheep, to remove the license to shoot and kill, and to provide for such animals being impounded only instead. This brought the meeting to a close.---G. P. FONSECA, Secretary.

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Ocho Rios (St. Ann).---Wednesday to Friday 9th to 11th inst., was filled with good work over Mr. Arnett's quarterly visit to the district.

Wednesday brought welcome rain so that only Breadnut Hill could be visited, Hyattsfield being left as an extra for Friday. On Thursday, Shaw Park, with the immediate neighbourhood of Ocho Rios was taken, and the annual general meeting of the Branch, at which Mr. Arnett was present, took place at 7.30 p.m. in the Court House. A good gathering, representative of the most active element of the Branch assembled, over which the Rev. G. Nutt presided. He was supported by Messrs. Cory, Geddes, Taylor, Watson, Corbett, Harrison, Cox, the Secretary (Mr. L. C. B. Yeoman) and Rev. E. Edmonds. The retiring officials and committee, with one or two alterations, were unanimously re-elected as follows: President: Rev. G. Nutt; Vice-presidents: Messrs. Cory, Cohen, Geddes and A. E. Mesquita; Secretary and Treasurer: Mr. L. C. B. Yeoman. Committee: Messrs. W. Harrison, Corbett, C. F. Cox, W. T. Scott, E. S. Taylor, Watson, H. Pink and Rev. F. Edmonds. On the suggestion of the Instructor, the meeting was thrown open for general discussion on topics of interest, and a most useful and interesting debate followed on oranges, cotton, small stock, experimental plots, and guinea grass. The Instructor then spoke on the various questions raised, beginning with cotton cultivation. With regard to small stock Mr. Arnett gave some very interesting items of the Anglo-Nubian breed of goats. Mr. Arnett's remarks were very much appreciated, and it was resolved to undertake the experimental stations for cotton in conjunction with the Instructor, one upland and the other near the sea, if Mr. Barclay thinks the conditions favourable. Also it was resolved that the several members who had already tried cotton culture should continue it further; that a stud goat should be obtained to improve the local breed, and that the Instructor should visit new districts which had no members resident on future occasions.—L. C. B. YEOMAN, Secretary.

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Central Cornwall (St. James).—A meeting was held at Bickersteth Schoolroom on Friday, 11th June. Present: P. J. Innerarity, R. Kentish, W. Plummer, W. H. R. Kerr, James Geddes. D McKinley, H. R. Tharpe, Wm. McKab, J. H. Oliphant and H. D. D. Mennell, Travelling Instructor. In the absence of the President, Mr. Oliphant, as Vice-President, occupied the chair. As the Secretary was absent, Mr. Mennell was asked to act as Secretary, but there were no minutes of the previous meeting read, as the Secretary had not sent in the minute book. Mr. Innerarity spoke at some length on the necessity and advantage of keeping up to its full strength the Central Cornwall Branch, at the same time showing how impossible it was for the Agricultural Instructor to be always present at their meetings, and that his absence from those meetings should not in any way debar the members from holding pleasant and useful meetings. Mr. Plumer followed in the same strain. It was decided that this meeting should be adjourned until Saturday, 10th July, at 11 o'clock, when the election of officers for the ensuing year should be held. The acting Secretary was asked to write several gentlemen, asking for their co-operation.—H. D. D. MENNELL, for Secretary.

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Newmarket (St. Elizabeth).—A meeting of this Branch Society was held on the 4th June, at 4 p.m. There were present Geo. E. Daly, Esq., J.P., in the chair, Messrs. H. A. Forde, John A. Wallace, M.P.B., the Secretary and ten other members. After the reading and confirmation of the minutes of the last meeting, Mr. Wallace submitted his report of the last show. The Chairman, in his usual pleasant manner, thanked Mr. Wallace for performing the lion's share, which was his desert as show secretary, complimented him on the judicious manner in which he pioneered the finances, thereby benefiting the Society to the extent of a balance after meeting the expenses incidental to a successful show. Mr. Wallace

the district, Mr. Palache, which intimated that he intends visiting the Branch on the 18th, and that notices be circulated to that effect. A resolution moved by Mr. J. A. Wallace and seconded by Mr. W. K. Sullivan, was read :---" That this Branch desires to bring to the notice of the Government, through the parent Society, the following : (1) That in the past years the peasant proprietors of these and surrounding districts and the members of this Branch, were stimulated by the Instructors and others of the Jamaica Agricultural Society, to plant oranges and grape fruits : since then large crops are available. (2) That the oranges and grape fruits grown here are in quality second to none in the island, *vide* remarks in one of Mr. Cradwick's reports of last year and also of Mr. Palache's at Newmarket and Kendal shows of 1908. (3) That owing to the heavy duties on citrus fruits in the United States of America, scarcely any business has been done in these districts, and the little that has been done, the prices have ranged from 9d. to 1/- per barrel. (4) That the nearest railway stations from Newmarket, the centre of these districts, are Ipswich, Montpelier and Cambridge, distance 16, 18¾ and 23 miles respectively. All of these stations are approachable from here over tedious grades, and therefore are impracticable for trading. (5) That the nearest and natural shipping port is Black River, 13 miles, with an easy gradient. (6) That many members of this Branch are anxious and willing to cooperate and ship their fruits to the United Kingdom, but find that they can get no shipping facilities at Black River, as the Imperial Direct West India Mail coastal steamer does not connect with the out-going Bristol boats. (7) The members of this Branch are disheartened and consider that the results of the lessons of your Instructors are not helpful to them in this instance. (8) That this Branch advocates you as the executive of the Jamaica Agricultural Society, to approach His Excellency the Governor and to endeavour to get him to arrange the itinerary of the Imperial Direct West India Mail coastal steamer so made as to arrive at Kingston during the orange season from the eastern route to connect with the out-going Bristol boats, and so enable this portion of the island to get some of the facilities that are given at the other end, which will materially help us. (9) That this Branch wishes to point out that if the above arrangements were carried out, that the ports of Sav.-la-Mar, Black River, Alligator Pond and Milk River, would be open to any one of the settler classes who would care to ship their fruits to England direct. (10) Also to point out that no one who uses these ports can now obtain *direct* shipping facilities unless they send their fruits to the railway or by coastal steamers, to remain in Kingston for at least four to five days---the former at a cost too great and the latter too much delay for such stuffs as oranges, grape fruits and bananas. The members present by unanimous assent, agreed to each clause in the resolution and supported it heartily. The resolution embodies a grievance (or grievances) the removal of which would greatly enhance the material prosperity of this and other districts similarly affected. The Secretary was instructed to write a letter to Mr. H. A. Forde, ascertaining the possibility of obtaining premises for rent and the charge thereof, for the purpose of holding the Society's monthly meetings. An election of officers, though late, was the next item and resulted in G. E. Daly, Esq., J.P., being re-elected President ; W. K. Sullivan, Esq., Vice-president and Treasurer and M. A. Harvey, Esq., honorary Secretary. Mr. J. A. Wallace moved and Mr. H. A. Forde seconded, that Mr. W. K. Sullivan be authorized to pay over £2 to the Loan Bank in lieu of the Society's indebtedness for purchase and upkeep of the Society's late Poland China boar. The meeting adjourned for the 18th to conform with Mr. Palache's request.---M. A. HARVEY, Secretary.

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Aberdeen (Portland).—A special meeting of this Branch was held on May 22nd, 1909, Mr. J. E. Bailey, Vice-president in the chair. There

were only a few members present, also the Travelling Instructor, Wm. Cradwick, Esq. After the usual preliminary introductions, Mr. Cradwick proceeded to address the meeting respecting the Snow Hill Show, to be held on June 24th. He urged on his hearers the necessity of taking exhibits to the show and of supporting it by subscriptions ; which suggestions were accepted, and fair promises made as to their being carried out. The speaker then briefly referred to the coming Buff Bay Show, to be held on August 2nd, 1909. He next spoke of the sore mouth disease of horsekind, which may be found in several districts in this island, and suggested what may be done to effect a cure should it appear in this district. In conclusion Mr. Cradwick referred to the Prize Holdings Competition to be held in this parish early next year. A vote of thanks was then tendered to the speaker and the meeting closed.---H. W. HAY, Secretary.

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Smithville (Clarendon).---A special meeting of this Branch was held in the School-chapel on Wednesday, 12th May. Since the announcement was made that Messrs. J. Barclay, Secretary of the Jamaica Agricultural Society, J. Hirst and E. Arnett, Instructors, would visit the Society, every member looked forward to their coming with a great deal of interest. These gentlemen, with the exception of Mr. Arnett, who was unable to turn up, on their arrival in the district, visited several holdings. At the meeting there was a large attendance of members and visitors. The President, Mr. W. Reid, occupied the chair. After welcoming Messrs. Barclay and Hirst, and stating that the meeting was convened for distribution of prizes and certificates to members who had been successful in the Prize Holdings Competition, he asked Mr. Barclay to address the meeting. Mr. Barclay stated that the inhabitants of this district are very fortunate in having fertile soils, plenty of springs and good seasons ---everything congenial to their welfare. He advised them to develop a thirst after knowledge agricultural, and not to depend upon their climatic advantages too much, but cultivate to the utmost. He pointed out that woodash is a valuable fertilizer, one-third of the weight of which is lime, and the other two-thirds potash, and phosphoric acid, that some planters ---he himself for instance---realized the value of this manure and purchased it at 6d. per barrel, yet hundreds of settlers ignorant of its value, let piles of it go to waste. He then referred (a) to the Prize Holdings Scheme and the good it was doing in every direction, and augured its future benefit to the island ; (b) to the aim and scope of the Agricultural Society and the duties of the Instructors. He pointed out that three-fourths of the export value of the island is got from bananas and cocoa, and they were fortunate in having the finest conditions possible to grow these except a good road. Before distributing the prizes Mr. Barclay showed that there was only one regular prize---four being consolation prizes---at the former Prize Holdings Competition, as against five regular prizes this year for the district, which gave him very great pleasure. Mr. Robert Pink, third prize in first class ; Mr. Jarod Thomas divided the fifth prize in the second class, with Mr. John Christian. Mr. Joseph Deacon, first prize in third class; Mr. Marcus Edwards divided the fourth with Mr. Abraham Spencer of Frankfield. Mr. Hirst, in addressing the meeting, said that in comparing the holdings of four years ago with the present, the latter showed a decided improvement on the former. The following resolution was moved by Mr. Hirst and seconded by Mr. Charles Dove : "That this Society request Mr. Barclay to bring before the Board of Management of the Jamaica Agricultural Society, the fertility of this district, the amount of produce it contains, the character of its people as cultivators, and solicit their support on any further representations this Society may make to the Government putting forth the need of three miles of main road to connect with the existing main road from Thompson Town to Four Paths."